



-1-

SEQUENCE LISTING

<110> Lightfoot, David
Meksem, Khalid

<120> ISOLATED POLYNUCLEOTIDES AND POLYPEPTIDES RELATING TO LOCI
UNDERLYING RESISTANCE TO SOYBEAN CYST NEMATODE AND SOYBEAN
SUDDEN DEATH SYNDROME AND METHODS EMPLOYING SAME

<130> 1268/4/2

<150> 60/178,811

<151> 2000-01-28

<160> 122

<170> PatentIn version 3.0

<210> 1

<211> 87

<212> DNA

<213> soybean

<400> 1

gaattcatgg tttctcttat gacattggtg ccaagtaata ctactatata aattcagatt 60

tgggtttctg ataaccgtgg tcgttaa 87

<210> 2

<211> 92

<212> DNA

<213> soybean

<400> 2

gaattcatgg tttctcttat cttatgacat tgttgccaag taatactact atataaattc 60

agatttgggt ttcagataac cgtggtcggt aa 92

<210> 3

<211> 113

<212> DNA

<213> soybean

<400> 3

gaattcctaa tatacgagtg aatattattg taatgcttgt aaaaaaacat gataaaatgc 60

aaaaatttgg ggtgaatttt tacgacatta gtgaaaaaaa catatccctt taa 113

<210> 4

<211> 135

<212> DNA

<213> soybean

<400> 4

per paper

11

ttaaagggat atgttttttt cactaatgct gtaaaaattc acccagattt ttgcattttc	60
tttgaaaaaa tgtactagat atatcatggt tttttacaag cattacaata atattcactc	120
gtatattagg aattc	135

<210> 5
 <211> 116
 <212> DNA
 <213> soybean

<400> 5	
gaattccggt tatctcagac aacttttggt tggtttggt atagtaaaga cacgattatc	60
caggctttga gaggcataga aataattttt ttatataaaa aaaaaagtct ctttaa	116

<210> 6
 <211> 113
 <212> DNA
 <213> soybean

<400> 6	
gaatttcggt tatctcagac aacttttggt tggtttggt atagtaaaga cacgattatc	60
caggctttga gaggcataga aataattttt ttatataaaa aaaagtctct tta	113

<210> 7
 <211> 409
 <212> DNA
 <213> soybean - Forrest

<400> 7	
gagtaaaacc ttgcgtgtga tcggtattac agtacgcagg gccaatcaac taaaatatct	60
gcaaacgata atataattat aagaaaaaga cacactttga gggcattttt gacttgagag	120
aactcaggta tcaatctaaa agcaacgctg ttcaccttga gctgaaacac ctggaggaga	180
aagcaaagca aaccaaacgc gagagagaaa taaagaacgg aaacagagag agagagagga	240
aggaccttgt tcaaagcaac ggggacaact ttagagccct ggcgcgcgtg ggggtcaata	300
agcgtaacct ggctgaggag agcctcggcg tcgtccttgc tgaagcagaa gaggaagagc	360
acgagaccaa gagaaactcc tcggaagcaa cggaattgg tacgcagtc	409

<210> 8
 <211> 417
 <212> DNA
 <213> soybean

<400> 8	
gagtaaaacc ttgcgtgtga tcggtattac agtacgcagg gccatgggtt gagccaatca	60

actaaaatat ttgcaaacga taatataatt ataagaaaaa gactcacttt gagggcattt 120
 ttgacttgag agaactcagg tatcaatcta aaagcaacgc tgttcacott gagctgaaac 180
 acctggagga gaaagcaaag caaaccaaac gcgagagaga aataaagaac ggaaacagag 240
 agagaggaag gaccttggtc aaagcaacgg ggacaacttt agagccctgg cgcgcgtggg 300
 ggtcaataag cgtaacctgg ctgaggagag cctcggcgcc gtccttgctg aagcagaaga 360
 ggaagagccc gagaccaaga gaaactctc ggaagcaacg ggaattggta cgcagtc 417

<210> 9
 <211> 165
 <212> DNA
 <213> soybean

<400> 9
 gagtaaatga aaatcgatca aaatcaaata atatatgctt tttttagttg tgttcaagta 60
 actttttttt attgaaaaaa tcgacccaag ttgaaacaca tgtttgagaa ttgttttgtg 120
 catccaacgt ttttcttgta caatcagctg tgagagggga attgg 165

<210> 10
 <211> 164
 <212> DNA
 <213> soybean

<400> 10
 gagtaaatga aaatcgatca aaatcaaata atatatgctt tttttagttg ggttcaagta 60
 ctttttttta ttgaaaaaat cgacccaagt tgaaacacat gtttgagaat tgttttgtgc 120
 atccaacgtt tttcttgtag aatcagctgt gagaggggaa ttgg 164

<210> 11
 <211> 114
 <212> DNA
 <213> soybean

<400> 11
 gaattcccag ctagatttgt atcaaacatg tattgtccac aaaatgttca agcatcttag 60
 ggaactgcta ttcttacttc taaatttttt attgacatcc aaagtgtgct ttaa 114

<210> 12
 <211> 114
 <212> DNA
 <213> soybean

<400> 12

gaattcccag ccagatttgt atcaaacatg tattgtccac aaaatgttca agcatccttag 60
ggaactgcta ttcttacttc taaatttttt attgacatcc aaagtgtgct ttaa 114

<210> 13
<211> 3106
<212> DNA
<213> soybean

<220>
<221> misc_feature
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 13
aatgggagga gtgggaaaga cagtggctat ggagcttggt ccggagggtg gggttgaatc 60
aagtgtgctc agggacaggt tattgtgatc cagcttcctt ggaaggggtt gaggggtcga 120
atcaccgaca aaattggcca acttcaaggc ctcaggaagc ttagtcttca tgataaccaa 180
attggtgggt caatcccttc aactttggga cttcttccca accttagagg gggttcagtta 240
ttcaacaata ggcttacagg ttccatacct ctttctttag gtttctgctt ttgcttcaag 300
tctcttgacc tcagcaacaa cttgctcaca ggagcaatcc cttatagtct tgctaattcc 360
actaagcttt attggcttaa cttgagtttc aactccttct ctggtccttt accagctagc 420
ctaactcact cattttctct cacttttctt tctcttcaaa ataacaatct ttctggctcc 480
cttcctaact cttgggggtg gaattccaag aatggcttct ttaggcttca aaatttgatc 540
ctagatcata actttttcac tggtgacgtt cctgcttctt tgggtagctt aagagagctc 600
aatgagattt cccttagtca taataagttt agtggagcta taccaaatga aataggaacc 660
ctttctaggc ttaagacact tgacatttct aataatgctt tgaatgggaa cttgctgct 720
accctctcta atttatcctc acttacactg ctgaatgcag agaacaacct ccttgacaat 780
caaatccctc aaagtttagg tagattgctt aatctttctg ttctgatttt gagtagaaac 840
caatttagtg gacatattcc ttcaagcatt gcaaacattt cctcgcttag gcagcttgat 900
ttgtcactga ataatttcag tggagaaatt ccagtctcct ttgacagtca gcgcagtcta 960
aatctcttca atgtttccta caatagcctc tcaggttctg tccccctct gcttgccaag 1020
aaatttaact caagctcatt tgtgggaaat attcaactat gtgggtacag cccttcaacc 1080
ccatgtcttt cccaagctcc atcacaagga gtcattgccc cacctcctga agtgtcaaaa 1140
catcaccatc ataggaagct aagcaccaaa gacataattc tcatagtagc aggagttctc 1200
ctcgtagtcc tgattatact ttgttgtgtc ctgcttttct gcctgatcag aaagagatca 1260

acatctaggc	cggaacggc	caagccaccc	gagggtagag	cggccactat	gaggacagaa	1320
aaaggagtcc	ctccagttgc	tggtggtgat	gttgaagcag	gtggggaggc	tggagggaaa	1380
ctagtccatt	ttgatggacc	aatggctttt	acagctgatg	atctcttgtg	tgcaacagct	1440
gagatcatgg	gaaagagcac	ctatggaact	gtttataagg	ctattttgga	ggatggaagt	1500
caagttgcag	taaagagatt	gagggaaaag	atcactaaag	gtcatagaga	atttgaatca	1560
gaagtcagtg	ttctaggaaa	aattagacac	ccaatgttt	tggtcttgag	ggcctattac	1620
ttgggaccca	aaggggaaaa	gcttctgggt	tttgatacat	gtctaaagga	agtcttgctt	1680
ctttcctaca	tggaaggttc	gtgtgctggg	tctttcatta	aagtgttgtg	tgtgctgggc	1740
tttaattata	atttggagtt	ttaccttagt	aatctgtata	attctaatacg	gagaacagta	1800
caaacaaaaa	cacctaagga	acaacacctt	anctttaata	taccatatca	ataaagtga	1860
atattttctt	ggatcatctg	atgcaggggg	aactgaacat	tcattattgg	ccacaagatt	1920
aaaatagccc	aagccttggc	cgggcttgt	ttgccttcat	tcccaggaga	acatcataca	1980
tgggacctcn	catccagcaa	tgtgtggctt	gatgaaaaac	aaatgctaaa	attcagattt	2040
tggtcttttt	cgggttgatg	tcaactgctg	ctaattccaa	cgtgatagct	acagctggag	2100
cattggatac	cgggcacctg	agctctcaaa	gctcaagaaa	gcaaactacta	aaactgatat	2160
ctacagtctt	ggtgttatct	tgttagaact	cctaacgagg	aatcacctg	gggtgtctat	2220
gaatggacta	gatttgcttc	agtgggttgc	ctcagttgtc	aaagaggagt	ggacaaatga	2280
ggtttttgat	gcagacttga	tgagagatgc	atccacagtt	ggcgacgagt	tgctaaacac	2340
gttgaagctc	gctttgcact	gtgttgatcc	ttctccatca	gcacgaccag	aagtccatca	2400
agttctccag	cagctgaaga	gattagacca	gagagatcag	tcacagccag	tcccggggac	2460
gatatcgtat	agcacaaatt	ttgcattgat	ttttttgtgc	caaagttagt	aggcctacta	2520
tatatatggt	ctatgattct	ttcattctta	tattatTTTT	gcctgtttga	atgcttgaat	2580
ttgtacatac	tcatactaca	ataaggtgta	gttctgggtta	attttacctc	tacctcaaag	2640
ctgggggtgta	attctgtttc	ctccaaggca	cataatagtt	gaaaatagtt	ctcaggagca	2700
ttcattgttt	attctgcaag	attctctttc	acggctgcta	tcttctatgc	atgccctgcc	2760
cataaatgca	ttatgaagaa	ttgtaacggc	tgtgtttttg	gacttcttca	aaaagtttat	2820
gttattgcca	ggtgtatata	tcaacatggt	ttaaagattt	tcaaacaatc	aggtttttaga	2880
tgtgggtttg	catgcatgag	attggactag	tgcgcttgat	gtagtataaa	atataaattg	2940

tccaatcaag caccctctac atgtccaaat aatgggcctt atgaaactta attttttaat 3000
 taaaactac agtaatcttt ttgaataaag atttacaat tacaacngac atgtgaagcn 3060
 gcattctttna ttgncaatct ttcaagttac tctattattt tctgcn 3106

<210> 14
 <211> 830
 <212> PRT
 <213> soybean

<220>
 <221> misc_feature
 <223> X is any amino acid

<400> 14

Asn Gly Arg Ser Gly Lys Asp Ser Gly Tyr Gly Ala Cys Ser Gly Gly
 1 5 10 15
 Trp Val Gly Ile Lys Cys Ala Gln Gly Gln Val Ile Val Ile Gln Leu
 20 25 30
 Pro Trp Lys Gly Leu Arg Gly Arg Ile Thr Asp Lys Ile Gly Gln Leu
 35 40 45
 Gln Gly Leu Arg Lys Leu Ser Leu His Asp Asn Gln Ile Gly Gly Ser
 50 55 60
 Ile Pro Ser Thr Leu Gly Leu Leu Pro Asn Leu Arg Gly Val Gln Leu
 65 70 75 80
 Phe Asn Asn Arg Leu Thr Gly Ser Ile Pro Leu Ser Leu Gly Phe Cys
 85 90 95
 Pro Leu Leu Gln Ser Leu Asp Leu Ser Asn Asn Leu Leu Thr Gly Ala
 100 105 110
 Ile Pro Tyr Ser Leu Ala Asn Ser Thr Lys Leu Tyr Trp Leu Asn Leu
 115 120 125
 Ser Phe Asn Ser Phe Ser Gly Pro Leu Pro Ala Ser Leu Thr His Ser
 130 135 140
 Phe Ser Leu Thr Phe Leu Ser Leu Gln Asn Asn Asn Leu Ser Gly Ser
 145 150 155 160
 Leu Pro Asn Ser Trp Gly Gly Asn Ser Lys Asn Gly Phe Phe Arg Leu
 165 170 175
 Gln Asn Leu Ile Leu Asp His Asn Phe Phe Thr Gly Asp Val Pro Ala
 180 185 190
 Ser Leu Gly Ser Leu Arg Glu Leu Asn Glu Ile Ser Leu Ser His Asn
 195 200 205

Lys	Phe	Ser	Gly	Ala	Ile	Pro	Asn	Glu	Ile	Gly	Thr	Leu	Ser	Arg	Leu	210	215	220	
Lys	Thr	Leu	Asp	Ile	Ser	Asn	Asn	Ala	Leu	Asn	Gly	Asn	Leu	Pro	Ala	225	230	235	240
Thr	Leu	Ser	Asn	Leu	Ser	Ser	Leu	Thr	Leu	Leu	Asn	Ala	Glu	Asn	Asn	245	250	255	
Leu	Leu	Asp	Asn	Gln	Ile	Pro	Gln	Ser	Leu	Gly	Arg	Leu	Arg	Asn	Leu	260	265	270	
Ser	Val	Leu	Ile	Leu	Ser	Arg	Asn	Gln	Phe	Ser	Gly	His	Ile	Pro	Ser	275	280	285	
Ser	Ile	Ala	Asn	Ile	Ser	Ser	Leu	Arg	Gln	Leu	Asp	Leu	Ser	Leu	Asn	290	295	300	
Asn	Phe	Ser	Gly	Glu	Ile	Pro	Val	Ser	Phe	Asp	Ser	Gln	Arg	Ser	Leu	305	310	315	320
Asn	Leu	Ser	Asn	Val	Ser	Tyr	Asn	Ser	Leu	Ser	Gly	Ser	Val	Pro	Pro	325	330	335	
Leu	Leu	Ala	Lys	Lys	Phe	Asn	Ser	Ser	Ser	Phe	Val	Gly	Asn	Ile	Gln	340	345	350	
Leu	Cys	Gly	Tyr	Ser	Pro	Ser	Thr	Pro	Cys	Leu	Ser	Gln	Ala	Pro	Ser	355	360	365	
Gln	Gly	Val	Ile	Ala	Pro	Pro	Pro	Glu	Val	Ser	Lys	His	His	His	His	370	375	380	
Arg	Lys	Leu	Ser	Thr	Lys	Asp	Ile	Ile	Leu	Ile	Val	Ala	Gly	Val	Leu	385	390	395	400
Leu	Val	Val	Leu	Ile	Ile	Leu	Cys	Cys	Val	Leu	Leu	Phe	Cys	Leu	Ile	405	410	415	
Arg	Lys	Arg	Ser	Thr	Ser	Lys	Ala	Gly	Asn	Gly	Gln	Ala	Thr	Glu	Gly	420	425	430	
Arg	Ala	Ala	Thr	Met	Arg	Thr	Glu	Lys	Gly	Val	Pro	Pro	Val	Ala	Gly	435	440	445	
Gly	Asp	Val	Glu	Ala	Gly	Gly	Glu	Ala	Gly	Gly	Lys	Leu	Val	His	Phe	450	455	460	
Asp	Gly	Pro	Met	Ala	Phe	Thr	Ala	Asp	Asp	Leu	Leu	Cys	Ala	Thr	Ala	465	470	475	480
Glu	Ile	Met	Gly	Lys	Ser	Thr	Tyr	Gly	Thr	Val	Tyr	Lys	Ala	Ile	Leu	485	490	495	
Glu	Asp	Gly	Ser	Gln	Val	Ala	Val	Lys	Arg	Leu	Arg	Glu	Lys	Ile	Thr	500	505	510	

Lys	Gly	His	Arg	Glu	Phe	Glu	Ser	Glu	Val	Ser	Val	Leu	Gly	Lys	Ile	515	520	525	
Arg	His	Pro	Asn	Gly	Leu	Ala	Leu	Arg	Ala	Tyr	Tyr	Leu	Gly	Pro	Lys	530	535	540	
Gly	Glu	Lys	Leu	Leu	Val	Phe	Asp	Tyr	Met	Ser	Lys	Gly	Gly	Leu	Leu	545	550	555	560
Leu	Phe	Tyr	Met	Glu	Gly	Ser	Cys	Ala	Gly	Ser	Phe	Ile	Lys	Val	Leu	565	570	575	
Cys	Val	Leu	Val	Phe	Asn	Tyr	Asn	Leu	Glu	Phe	Tyr	Leu	Ser	Asn	Leu	580	585	590	
Tyr	Asn	Ser	Asn	Arg	Arg	Thr	Val	Gln	Thr	Lys	Thr	Pro	Lys	Glu	Gln	595	600	605	
His	Leu	Xaa	Phe	Asn	Ile	Pro	Tyr	Gln	Xaa	Ser	Glu	Ile	Phe	Ser	Trp	610	615	620	
Ser	Ser	Xaa	Cys	Arg	Gly	Asn	Xaa	Thr	Phe	Ile	Ile	Gly	His	Lys	Met	625	630	635	640
Lys	Ile	Xaa	Gln	Asp	Leu	Ala	Val	Ala	Cys	Ser	Pro	Ser	Phe	Pro	Glu	645	650	655	
Thr	Ser	Tyr	Met	Asp	Leu	Xaa	Ser	Ser	Asn	Val	Cys	Xaa	Xaa	Asn	Xaa	660	665	670	
Met	Leu	Lys	Leu	Gln	Phe	Trp	Ser	Phe	Ser	Val	Asp	Val	Asn	Cys	Cys	675	680	685	
Xaa	Phe	Gln	Arg	Asp	Ser	Tyr	Ser	Trp	Ser	Ile	Gly	Ile	Pro	Gly	Thr	690	695	700	
Xaa	Ala	Leu	Lys	Ala	Gln	Glu	Ser	Lys	His	Xaa	Asn	Xaa	Tyr	Leu	Gln	705	710	715	720
Ser	Trp	Cys	Tyr	Leu	Val	Arg	Thr	Pro	Asn	Glu	Glu	Ile	Thr	Trp	Gly	725	730	735	
Val	Tyr	Glu	Trp	Thr	Arg	Phe	Ala	Ser	Val	Gly	Cys	Leu	Ser	Cys	Gln	740	745	750	
Arg	Gly	Val	Asp	Lys	Xaa	Gly	Phe	Xaa	Cys	Arg	Leu	Asp	Glu	Arg	Cys	755	760	765	
Ile	His	Ser	Trp	Arg	Arg	Val	Ala	Lys	His	Val	Glu	Ala	Arg	Phe	Ala	770	775	780	
Leu	Cys	Xaa	Ser	Phe	Ser	Ile	Ser	Thr	Thr	Arg	Ser	Ser	Ser	Ser	Ser	785	790	795	800
Pro	Ala	Ala	Gly	Arg	Asp	Xaa	Thr	Arg	Glu	Ile	Ser	His	Ser	Gln	Ser	805	810	815	

His Leu Pro Gly Arg Pro Leu Glu Pro Tyr Ser Glu Ser Tyr
820 825 830

<210> 15
<211> 726
<212> DNA
<213> soybean

<220>
<221> promoter_region
<222> (1)..(726)
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 15
gaatacgaat tccatttttcg cgacagtagc tcagaatagg ttcatactcc tgccatcttt 60
gaggcggnca atgcaacgtg taagacttca aggtgtctcc atctatcctg ccatgaaagt 120
caagtttcag gacaagtaat gcagaattat ggaaaagcaa tctgactaag acaaaagagc 180
ttcagagatt aacagaaaat agtgagccag aaaaaagatt gcgagacaga aattgggtcg 240
caacaaaaag ttgtctcttt tataatTTTT aattgaaatt ttcttaattt agctaactg 300
acttctacg gccacaattg cgtttgcaga cacttaaaaa acttgatggt gcagcaaaaa 360
tcacgtttta tttattattg atgtcaatta tttaacagtt ttatggttagg ttttaataaca 420
gtaggttgat gcaagaggct aaacattaat cagaaattga aaggcagggg tattacttct 480
tatccatata ctgattgagc gggtcctgaa gaatagcggg aaaaacttca agcgccagag 540
acaatagttt tttcttttca aacagcgct atgcaaattc ttccaatctc aagcttcaat 600
tcctatcgtc tcgaaccgga cttgntctgn ttnacctaaa tccccactcg gcattnatna 660
acttntcccc actttccttt ntctttccta tcgccaccgg tcttctatnc ccgcccgtcg 720
naatct 726

<210> 16
<211> 649
<212> DNA
<213> soybean

<220>
<221> partial_cDNA
<222> (1)..(648)
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 16
aggagtggga aagacagtgg ctatggagct tgttccggag gttgggttgg aatcaagtgt 60

```

gctcagggac aggttattgt gatccagctt ccttggaagg gtttgagggg tcgaatcacc 120
gacaaaattg gccaaacttca aggcctcagg aagcttagtc ttcattgataa ccaaattggg 180
ggttcaatcc cttcaacttt gggacttctt cccaacctta gaggggttca gttattcaac 240
aataggctta cagggttccat acctctttct ttaggtttct gccctttgct tcagtctctt 300
gacctcagca acaacttgct cacaggagca atcccttata gtcttgctaa ttccactaag 360
ctttattggc ttaacttgag tttcaactcc ttctctgggc ctttaccagc tagcctaact 420
cactcatttt ctctcacttt tctttctctt caaaataaca atctttctgg ctcccttctt 480
aactcttggg gtgggaattc caagaatggc ttcttttaggc ttcaaaattt gatcctagat 540
cataactttt tcactggtga cgttctctgt tctttgggta gcttaagaga gctcaatgag 600
aattccctta agcataataa ggtaggggga gctatcccaa atgaaatnt 649

```

```

<210> 17
<211> 558
<212> DNA
<213> soybean

```

```

<220>
<221> partial_cDNA
<222> (1)..(558)
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

```

```

<400> 17
aggantgggn aagacantgg ctatttttagc tttgggtccc gaggggtgggt tggaatcaan 60
tgngctcaag gacaaggat tgtgaaccaa cttnccttga aaggnttgag ggggcgaaac 120
accacaaaa atgggcaact tnaaagnctc angaagctta atcttnatga aaacccaaat 180
gggggggtcaa anccntcaac ttttggactt ctttccaacc ttagaggggg tcaattattc 240
aacaataggn ttacagggtc catacctctt tctttaaggt tctgcccttt gnttcagnct 300
cttgacctca acaacaactt gctnacagga agcaatccct tatagtcttg ctaattccac 360
taagctttat tggcttaact ttgagnttca actnctttct ntgggncttt accaactagn 420
ctaactcact cattttctct cacttttttt tntntttaaa aaaacaaaca tttntngntt 480
cccttctnac tcntgggggg gggaaaaaca annaaaggnt tctttaggnt tcaaaaaatg 540
atcctanaac ataacttt 558

```

```

<210> 18
<211> 794
<212> DNA

```

<213> soybean

<220>

<221> partial_cds

<222> (1)..(794)

<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 18

```

aatgggagga gtgggaaaga cagtggctat ggagcttggt cgggaggttg ggttggaatc      60
aagtgtgctc agggacaggt tattgtgata cagcttcctt ggaaggggtt gaggggtcga      120
atcaccgaca aaattggcca acttcaaggc ctcaggaagc ttagtcttca tgataaccaa      180
attggtgggt caatcccttc aactttggga cttcttccca accttagagg ggttcagtta      240
ttcaacaata ggcttacagg ttccatacct ctttctttag gtttctgccc tttgcttcag      300
tctcttgacc tcagcaacaa cttgctcaca ggagcaatcc cttatagtct tgctaattcc      360
actaagcttt attggcttaa cttgagtttc aactccttct ctggccttta ccagctagcc      420
taactcactc attttctctc acttttcttt ctcttcaaaa taacaatctt tctggctccc      480
ttcctaactc ttggggnggg aatttcaaga atggcttctt taggcttcaa aatttgatcc      540
tagatcataa cttttttnctg gtgacgttcc tgcttctttg ggtagcttaa gagagccna      600
tgagaattcc cttagtcatn ataagnttag tggagcttcc caantgaaat anggaccct      660
tntaggctta aacactngnc attctaataa tgccttgaat gggaacctcc ctgttccctc      720
tttanttate tcccttnenc ngctggange cagaccacn cntgncaatn aatccctcaa      780
agttaggtac atcg                                          794

```

<210> 19

<211> 781

<212> DNA

<213> soybean

<220>

<221> partial_cds

<222> (1)..(781)

<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 19

```

ggaggagtgg gaaagacagt ggctatggag cttgttccgg aggttgggtt ggaatcaagt      60
gtgctcaggg acagggttatt gtgatccagc ttccttgga ggggtttgag gggtcgaatc      120
accgacaaaa ttggccaact tcaaggctc aggaagctta gtcttcatga taaccaaatt      180
ggtggtcaat cccttcaact ttgggacttc ttccaacctt agaggggttc aagttattca      240

```

```

acaataggct tacaggttcc atacctcttt ctttaggttt ctgccctttg cttcaagtct 300
cttgacctca gcaacaactt gctcacagga gcaatccctt atagtcttgc taattccact 360
aagctttatt ggcttaactt gagtttcaac tnccttctctg gncctttacc agctagccta 420
actcactcat tttctctcac ttttctttct cttcaaaaaa acaaactttc tgggtccttt 480
ctactcttgg ggggggaatt ccagaatggn ttcttttaggg ttnaaaattg atcctagaca 540
tactttttac tggggacgtc ctgcttcttt ggnagcttaa agagctcaat gagattncct 600
tagcataata agttaggggg gctttnccaa agnaatagga ncctttntag gggttaaaaac 660
ctggcatttt taaaatgcct tgaangggac ttgnccgctn cccctntaat tatccncctt 720
acnccgntgg anggagagaa aancccttg caaanaaaac cctcaaaggt tagggngatc 780
g 781

```

```

<210> 20
<211> 861
<212> DNA
<213> soybean

```

```

<220>
<221> misc_feature
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

```

```

<400> 20
gaatgggagg agtgggaaag acagtggcta tggagcttgt tccggagggtt gggttggaat 60
caagtgtgct cagggacagg ttattgtgat ccagcttcct tggaaggggtt tgaggggtcg 120
aatcaccgac aaaattggcc aacttcaagg cctcaggaag cttagtcttc atgataacca 180
aattggtggt tcaatccctt caactttggg acttcttccc aaccttagag gggttcagtt 240
attcaacaat aggcttacag gttccatacc tctttcttta ggtttctgcc ctttgcttca 300
gtctcttgac ctcagcaaca acttgetcac aggagcaatc ccttatagtc ttgctaattc 360
cactaagctt tattggctta acttgagttt caactccttc tctggtcctt taccagctag 420
cctaactcac tcattttctc tcacttttct ttctcttcaa aataacaatc tttctggctc 480
ccttcctaac tcttgggggtg ggaattccaa gaatggcttc tttaggcttc aaaatttgat 540
cctagatcat aactttttca ctggtgacgt tcctgcttct ttgggtagct taagagagct 600
caatgagatt tcccttagtc ataataaagt ttaatggagc tataccaaat gaaataggaa 660
ccctttctan gcttaaacac ttgacatttn taataatgnc ttgaatggga acttgcttgc 720

```

taccctctnt aattatcctn cttacactgn tgaatgcaaa aaacaacctc ttgcaataaa	780
tcccttaaan ttangnnaat gggaaanttn tttntgattt gagtnaaacc aattaatggc	840
atattnttta acattttaan t	861

<210> 21
 <211> 761
 <212> DNA
 <213> soybean

<220>
 <221> misc_feature
 <223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 21	
gaatgggagg agtgggaaag acatgggggtt gaagggctgt acccacatag ttgaatattt	60
cccacaaatg agcttgagtt aaatttcttg gcaagcagag gggggacaga acctgagagg	120
ctattgtagg aaacattgaa gggattttaga ctgcgctgac tgtcaaagga gactggaatt	180
tctccactga aattattcag tgacaaatca agctgcctaa gcgaggaaat gtttgcaatg	240
cttgaaggaa tatgtccact aaattggttt ctactcaaaa tcagaacaga aagattacgc	300
aatctaccta aactttgagg gatttgattg tcaaggaggt tgttctctgc attcagcagt	360
gtaagtgagg ataaattaga gagggtagca ggcaagttcc cattcaaggc attattagaa	420
atgtcaagtg tcttaagcct anaaaggggtt cctatttcat ttggtatagc tccctaaact	480
tattatgact aagggaaatc tnattgagct ctnttaactc ccaaagaaca ggacgtncca	540
gtgaaaaagt atnatctagg atcaaatttg aacctaataaa gcattttgga tcccccaaa	600
gtaggaagga gcanaagatg tntttnaaaa anaaatanaa aatatagtag tactgtgaagc	660
naaaaggtga ctaatagcat aantatgata caaattagga tttcttanaa ttttttnnaa	720
aatnnnangn aaccaaaaaa gngacntncn tttnaanacc c	761

<210> 22
 <211> 856
 <212> DNA
 <213> soybean

<220>
 <221> misc_feature
 <223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 22	
aatgggagga gtgggaaaga cagtggctat ggagcttggt ccggaggttg ggttggaatc	60

```

aagtgtgctc agggacaggt tattgtgata cagcttcctt ggaaggggtt gaggggctga 120
atcaccgaca aaattggcca acttcaaggc ctcaaggaagc ttagtcttca tgataaccaa 180
attggtgggt caatcccttc aactttggga cttcttccca accttagagg ggttcagtta 240
ttcaacaata ggcttacagg ttccatacct ctttctttag gtttctgcct ttgcttcaag 300
tctcttgacc tcagcaacaa cttgctcaca ggagcaatcc cttatagtct tgctaattcc 360
actaagcttt attggcttaa cttgagtttc aactccttct ctggtccttt accagctagc 420
ctaactcact cattttctct cacttttctt tctcttcaaa anaacaatct ttctggctcc 480
cttcctaact cttgggggtg gaattccaag aatggcttct ttaggcttca aaaattgata 540
ctagaacata acttttttac tgggtgacgt cctgcttttt ttggtaggct taaaganaag 600
ccaatgagaa tttccttagt catnataaag ttaaggggag cttttnccaa atgaaaaaag 660
gaaccctttn taggcttaaa nanacttgac aatttntaat aatgcccttg aatngggaac 720
ttgcctgcta ccccttttaa tttatcctac ttaccctgnt ngaaggcaaa naacaacccc 780
tttgcaataa aaaccnaaa gttaagggga angnggnact ttntntctnn tttngggnaa 840
accanttann ggcnct 856

```

<210> 23

<211> 826

<212> DNA

<213> soybean

<220>

<221> misc_feature

<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 23

```

gaatgggagg agtgggaaag acatgggggt gaagggctgt accacatag ttgaatattt 60
cccacaaatg agcttgagtt aaatttcttg gcaagcagag gggggacaga acctgagagg 120
ctattgtagg aaacattgaa gggatttaga ctgcgctgac tgtcaaagga gactggaatt 180
tctccactga aattattcag tgacaaatca agctgcctaa gcgaggaaat gtttgcaatg 240
cttgaaggaa tatgtccact aaattgggtt ctactcaaaa tcagaacaga aagattacgc 300
aatctaccta aactttgagg gatttgattg tcaaggaggt tgttctctgc attcagcagt 360
gtaagtgagg ataaattaga gagggtagca ggcaagttcc cattcaaggc attattagaa 420
atgtcaagtg tcttaagcct agaaaggggt cctatttcat ttggtatagc ttcactaaac 480

```

ttattatgac taanggaaat ctcatgagc tctcttaagc tacccaaaga agcaggaacc 540
gtcaccagtg aaaaaagtta tgatctagga tcaaattttg aacctaaaaa accattcttg 600
gaattccacc ccaagaatta ggaagggagc canaaagatt gttattttga aaaaaaaga 660
aaagtgagaa aaaatgagtg agttaggctt actggtaaaa ggaccaaaaa aaggantttg 720
aaactnaaan ttaanccaat aaaacttaat ggnaataaca aanactttta nggaattctc 780
ttttnaacaa attnttncctt angncaaaaa anttaancaa aggnct 826

<210> 24
<211> 571
<212> DNA
<213> soybean

<220>
<221> misc_feature
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 24
tgggactggc tgtgactgat ctctctggtc taatctcttc cagctgctgg agaacttgat 60
gaacttctgg tcgtgctgat ggagaaggat caacacagtg caaagcgagc ttcaacgtgt 120
ttagcaactc gtcgccaact gtggatgcat ctctcatcaa gtctgcatca aaaacctcat 180
ttgtccactc ctctttgaca actgaggcaa cccactgagg caaatctagt ccattcatag 240
acaccccgagg tgatttcctc gttaggagtt ctaacaagat aacaccaaga ctgtagatat 300
cagtttttagt gtttgctttc ttgagctttg agagctcagg tgcccgggtat cccaatgctt 360
cagctgtagc tatcacgttg gaattagcag cagttgacat caaccgagaa agacccaaaat 420
ctgcaatttt agcatttgna ttctcattaa acaacacaat gntggatgng anggtncat 480
ggatgaaggt cttctnggna agnaagnaaa acaaagcacc gggccaagg nttgggcta 540
ttcaaccttg gggggcaaac naanaaatgt t 571

<210> 25
<211> 727
<212> DNA
<213> soybean

<220>
<221> misc_feature
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 25
ttacaactag tggtatcgga gaatgaaaaa ttgaagaata ataagttcag ctataataaa 60

ctcgagggag gaaaaacaaa gaaattcatg ataaatagat ataacttatt aaattttaagg	120
ggtgtatttg cacaccctga attatagaga ttcttatatc tttgagaaaa taattaaatt	180
gggaaaaaag agataatgac tgattgagat ttgcctcaga attgttcggt ttaatattgg	240
tacgaatcta atgggtttat cctgaaagat gctcacaagt attgagggac taataaattg	300
tttataaact actactaaat gagatgagac tttaagggtg actgaagcaa tatcatttaa	360
aaaatgacta ctcgattttg tgttgagaaa atttattttc aatgaaaaga aaatatatac	420
atataagata aagtaattaa cataaccgaa aggaaataaa atgcaacatt ataaaaacta	480
caactatata aatgatatat acaactccta gcacatgcat tggattgtga attaattaa	540
atgttgtatg gatggtaaaa attcaaaact aaacccccca caatttaagt gacacagaat	600
ataattagcg gtggtctttt tacagaaacg acgagaacaa aggtgtcaaa ggaaaggaga	660
tggatgcatg tggatgagc tcatncaatt ccaacctgtt gtggaccaa gccgaagtcc	720
ttgacnn	727

<210> 26
 <211> 560
 <212> DNA
 <213> soybean

<220>
 <221> misc_feature
 <223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 26	
attacgnag ctctatacga ctactatag ggagacaagc ttgcatgcct gcaggtcgac	60
tctagaggat ccccggttac cgagctcgaa ttcccaatgc cagagcttcc ctatcgtggg	120
ccccacctat gaagaataca cccacgttga aatacatggt gttgttggtg gacgcgcca	180
gccgagagtg ccggtccacg agtatcccca acgtgcatgg cgcacgcgct tgaaacctag	240
tattcatctt cctgatggag gcagccacgt gtccgacaag gtcaatgttg ccgttttcgt	300
gaaaagggat gataatgaaa ggcaccatat tgtcttgggc gaggttgaaa atggcgtcgt	360
gcatgctctt gtaagggtgcc acgttgatgt agggagaac cttgactggc ccacttgagt	420
tgttgagta gttttcgaag gcttgcatga tgtggttggg gttggggtaa ttcacagaca	480
agaattttct gngaccctg tctatgtttt atgggaagga gaatgggtgc cttttcccca	540
cnagctngat naggnggact	560

<210> 27
 <211> 630
 <212> DNA
 <213> soybean

<220>
 <221> misc_feature
 <223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 27
 actgcatgca tgcaagcaaa tttaacttta cacaacacac caccagagtg taagctgttt 60
 cataaaaaat gattgtttcg ggctttcgga tcacaaggct tgttttagtat tcggtaagaa 120
 agaaagaaat aggtgataaa taaagtggat agaaacataa aagaaaggaa taaagtaatg 180
 aaaataaggg agaagtagaa taatggaaat agataagaaa tagaatggat tcgatagtat 240
 atctagttta agagaaataa gaaaaaataa gaacaagaaa aaaaattgca ttttaattta 300
 ttatttgtac tgtatcgatg attggcacga gattataagt tttttttttc gtgtttaccg 360
 ttgaaggatt atatatcata ccatttggtt gtcaaccaac acggaacttt aagtctcttg 420
 atgttcaaaa gcacttaaaa ctaaggaatt ttacatcata ttagtcgtct gtagactgat 480
 acaggatttt aagcctatat atctagcatt gatccggttg gcaatcaata tcacattaat 540
 gatcggtaaa ccattcatat aacccttttg attggtcaag aaatggcttt atgaatccca 600
 ggattgagcc cagaancagg ngataactagn 630

<210> 28
 <211> 756
 <212> DNA
 <213> soybean

<220>
 <221> misc_feature
 <223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 28
 attggcttaa cttgagtttc aactccttct ctggctcttt accagctagc ctaactcact 60
 cattttctct cacttttctt tctcttcaaa ataacaatct ttntggctcc cttntaact 120
 gtgggggggg gaatancaag ggnngcttta ggctgcaaaa tttgatccta gatcataact 180
 ttttcactgg tgacgttcct gcttctttgg gtagcttaag agagctcaat gagatttccc 240
 ttagtcataa taagtttagt ggagctatac caaatgaaat aggaaccctt tctaggctta 300
 agacacttga catttctaataaatgccttga atgggaactt gcctgctacc ctctctaatt 360

tatcctcact tacactgctg aatgcagaga acaacctcct tgacaatcaa atccctcaaa	420
gttttaggtag attgcgctact ctttctctgtt ccgattttga gtagaaacca atttagtgga	480
catattcctt caagcatngc nnacatttcc tcgcttaggc agcttgattg tcaactgaata	540
atttcaggtg gagaaattnc agtctncttt gacagtcagc gcagtctaaa tcttcttcaa	600
tggttntctac aataggcctc tcagggtctg gcccccttt gnttggccaa ggaaanttaa	660
cttaagctta tttgngnggg aaanattcaa ctatgggggg acncggccct ttaaaccoca	720
gggnttttcc cagggttcctt ccaaggngnc anttgt	756

<210> 29
 <211> 566
 <212> DNA
 <213> soybean

<220>
 <221> misc_feature
 <223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 29	
gacccttggt ctatagaacc gaattcgagc tcggtaccgc gggatcctct agagtcgacc	60
tgcaggcatg caagcttatt attactacta ctacttatct tcaactccacc aactgtgtc	120
actaaaaccg gaaccatccc catacaaat tctactgaag acaacatata cccaatatt	180
cccaatgcat cagcggttctc catgaaagtt gtcatttctt ttccattcaa agatccatca	240
ttgtggcgcc ttcccaccat cacaagatca tagtttctct ccaaactatg cactgcttcc	300
aacacctcca ccccatcgtc caccgtaatc tcgtaccaac aaacggtacc aatgccatat	360
ttcatgctct tgaactcgtc aattaacccc tcgtccaaca tggatatctc ctcttctct	420
tcacgtctct ctcttgcaaa ataattttac aaccacacgg tttcttggtc acgataacaa	480
acctaatacaa gctaccctcg tatctgcacg ctccgcattc gaattcccaa tgccagagct	540
tccttatcgg gggncaccac tatgaa	566

<210> 30
 <211> 673
 <212> DNA
 <213> soybean

<220>
 <221> misc_feature
 <223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

```

<400> 30
gggactggct gtgactgac tctctggtct aatctcttcc agctgctgga gaacttgatg      60
aacttctggt cgtgctgatg gagaaggatc aacacagtgc aaagcgagct tcaacgtggt      120
tagcaactcg tcgccaaactg tggatgcac tctcatcaag tctgcatcaa aaacctcatt      180
tgtccactcc tctttgacaa ctgaggcaac cactgaggc aaatctagtc cattcataga      240
caccacaggt gatttctctg ttaggagttc taacaagata acaccaagac tgtagatata      300
agtttttagtg tttgctttct tgagcttttg agaagctcag gtgcccggtg tcccaaattgc      360
ttccagctgt agcttatcac cgttgggaat taagcagcaa gttggacatt caaccggag      420
naaaagaccc aaaaattttg caaattttta agcaatttng gnanttcttn aatcaaggcc      480
aaccaccaat tggnttggga atggtggaag ggtttcccca atggttaattg gaagggtttc      540
ttcctnngg gaaaatggaa aggggcaana aaacaaaggc ccaacngggg ccccaaagg      600
nttttggggg ccttattttt tncnaatncc ctttggnnng ggncccaaat tcnaaantgg      660
aaattggntt tnn                                                    673

```

```

<210> 31
<211> 736
<212> DNA
<213> soybean

```

```

<220>
<221> misc_feature
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

```

```

<400> 31
gttgnntagn tgcactatag aatncgaatt caatttaaac atttttaatt ttttgtcttt      60
gtattctatt ttttcataaa ttctaattct gctaataatt tcaattcata ttaagatcgg      120
taaatagaaa atctagaaaa aaaaacaaaa aaagtatttt tttttcattg attttatttt      180
caattgattt gtcactaaca aactgattcc tcttaaatct cacaaaagta catgtcgata      240
taaatatgag attataaatt catgatattt attttcgatt ttacatata atgttttttt      300
tatctttttt agttcctaatt aagcattttt aaatgtctta tgttcctact ttgcatatca      360
gggaccatt aatgggacga ggtcactgag agcatgaaca acgtgtcttt cgtctccga      420
acaacgtgcc atcttgacag ctcaccacct cggaatccct ggagtgggtc cactgattt      480
tccggggaaa gcccgccggt gaaagtttga ttacaccggc aatgtgagcc ggtcgctgtg      540
gcaaccctgg tncgggaca aangcacacc aagttgnaan tttgggtccg agggnggcc      600

```

naattgggggt tgcanggata ctaagcnntt ggnnacttnc ctgggnaacc caccctaata	660
nccatntttc aatgggggnac cnaattttctt acaattggnt gcaananggg nttttngggg	720
aaccttttna ccccca	736

<210> 32
 <211> 566
 <212> DNA
 <213> soybean

<220>
 <221> misc_feature
 <223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 32	
gaccnnagac gctactatag ggagacaagc tatttgaagg ggaactgaga acgatccaaa	60
gcactccaag aaacagagag tttcacattg tttgttgtgt acataatgaa gcaaacgtgc	120
gtggcatcac tgccttatta gaagagtgc acccagtgc agagagcccc atatgcgtct	180
acgcagtcca ccttatcgag ctctgtggga aaagtgcacc cattctcctt cccataaaac	240
atagacacgg tcgcagaaaa ttcttgtctg tgaattaccc caacaccaac cacatcatgc	300
aagccttcga aaactactcc aacaactcaa gtggggccagt caagggttctt ccctacatca	360
acgtggcacc ttacaagagc atgcacgacg ccattttcaa cctcgcccaa gacaatatgg	420
tgcctttcat tatcatccct tttcacgaaa acggcaacat tgaccttgtc ggacacgtgg	480
ctgcctccat caggaagatg aatactaggt ttcaagcgca tgcgccatgc cgttggggat	540
actcgnggcc ggnactctng gtgggn	566

<210> 33
 <211> 614
 <212> DNA
 <213> soybean

<220>
 <221> misc_feature
 <223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 33	
acaacaagca acgaacagct tttaacctta aactaggcaa atgccaatat taaacaacaa	60
ataattaaaa ttgtaaggct ggtcgagtat aaattaaaca aaaggccctc tattcaaacc	120
ttcatatata atacctgntt ttaattaacg cggactactt tttcatataa aaaaaagatc	180

attagaggat taatttaaag cgnttttagtt tttaattacc aaagagtata attattatta	240
ggcgcttttg cccacaatca atcacctaaa caagaaaaag aaaaagaaaa aaaaaggcaa	300
attggactaa tgcaaaagtg gcacaatctt tgncttgaac tctttaatta gcaacaaatn	360
atactcttct gcacaaatca caagaatacc ttacatgaaa agaattgnaa tntgacgggt	420
tacattaaat tatatgcagg tttctgcagg gaatcaattn tcaagaattt aaggggggggt	480
gggaattttc aatagctagc ttgactagca aagggaaaga ataaaggnaa aangcttctt	540
ggctnggcct tttggganng gnaccccttt ngctaaaccg gaaanggnta tangaatggg	600
aaaggagana atcg	614

<210> 34
 <211> 602
 <212> DNA
 <213> soybean

<220>
 <221> misc_feature
 <223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 34	
aggctagctg gtaaaggacc agagaaggat ttgaaactca agttaagcca ataaagctta	60
gtggaattag caagactata agggattgct cctgtgagca agttgttgct gaggtcaaga	120
gactgaagca aagggcagaa acctaaagaa agaggatatgg aacctgtaag cctattgttg	180
aataactgaa cccctctaag gttgggaaga agtcccaaag ttgaagggat tgaaccacca	240
atttggttat catgaagact aagcttcttg aggccttgaa gttggccaat tttggcgggtg	300
attcgacccc tcaaaccctt ccaaggaagc tggatcacia taacctgtcc ctgagcacac	360
ttgattccaa cccaacctcc ggaacaagct ccatagccac tggcattcca gctcccgcaa	420
gaacccttct ggatcagcca actcttgctt gaaagcttat cacatgtacc tctctacaga	480
taggaggggtg cttcttcctt ttcactggnc tacctcttcg ggaataagcc acctaatgag	540
aaagaaagan ctgggatagc taactctaca tagnctcaag gcnagagata attagggaaa	600
ng	602

<210> 35
 <211> 644
 <212> DNA
 <213> soybean

<220>

<221> misc_feature
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 35
ggaattttga agagaagtaa agtgagagaa aatgantgan nnaggctagc tggtaaagga 60
ccagagaagg atttgaaact caagttaagc caataaagct tagtggaatt agcaagacta 120
taagggattg ctctgtgag caagttgttg ctgagggtcaa gagactgaag caaagggcag 180
aaacctaaag aaagaggtat ggaacctgta agcctattgt tgaataactg aacccctcta 240
aggttgggaa gaagtcccaa agttgaaggg attgaaccac caatttggtt atcatgaaga 300
ctaagcttcc tgaggccttg aagttggcca attttggcgg tgattcgacc cctcaaacct 360
ttccaaggaa gctggatcac aataacctgt cctgagcac acttgattcc aacccaacct 420
ccggaacaag ctccatagcc actggcattc cagctccgc aagaaccctt ctggatcagc 480
caactcttgc ttgaaagctt atcacatgta cctctctaca gataggaggg tgcttcttcc 540
ctttcactgg nctacctctt cggaataag ccacctaatg agaaagaaag anctgggata 600
gctaactcta catagnctca aggnagaga taattagga aang 644

<210> 36
<211> 748
<212> DNA
<213> soybean

<220>
<221> misc_feature
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 36
attggcttaa cttgagtttc aactccttct ctggctcttt accagctagc ctaactcact 60
cattttctct cacttttctt tctcttcaaa ataacaatct ttctggctcc cttcctaact 120
cttgggggtg gaattccaag aatggcttct ttaggcttca aaatttgatc ctagatcata 180
actttttcac tggtgacgtt cctgcttctt tgggtagctt aagagagctc aatgagattt 240
cccttagtca taataagttt aatggagctg taccaaatga aataggaacc ctttctaggc 300
ttaagacact tgacatttct aataatgctt tgaatgggaa cttgcctgct accctctcta 360
atttatcttc acttacactg ctgaatgcag agaacaacct ccttgacaat caaatccctc 420
aaagtttagg tagattgcgt aatctttctg ttctgatttt gggtagaaac caatttagtg 480
gacatattcc ttcaagcatt gcaaacattt cctcgcttag gcagcttgat ttgcactgaa 540

taatttcagt ggagaaattc cagtctcctt tgacagtcaa gcgcaagtct aaatctcttc 600
aatgtttcct acaatagcct ctcannggtct gncceccctc tgcttgccaa gaaatttaac 660
tcaagctcat ttgtgggaaa tattcaacta tgtgggacag nccttcaacc ccatgttttn 720
ccaagcttca tacaaggagc atggccct 748

<210> 37
<211> 563
<212> DNA
<213> soybean

<220>
<221> misc_feature
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 37
ctggctgtga ctgatctctc tgggtctaate tcttcagct gctggagaac ttgatgaact 60
tctggctcgtg ctgatggaga aggatcaaca cagtgcaaag cgagcttcaa cgtgttttagc 120
aactcgtcgc caactgtgga tgcattctctc atcaagtctg catcaaaaac ctcatattgtc 180
cactcctctt tgacaactga ggcaaccac tgaggcaaatt ctagtccatt catagacacc 240
ccaggtgatt tctcgttag gagttctaac aagataacac caagactgta gatatcagtt 300
ttagtgtttg ctttcttgag ctttgagagc tcaggtgccc ggtatcccaa tgctccagct 360
gtagctatca cgttggaatt agcagcagtt gacatcaacc cgagaaagac caaaatctgc 420
aatttttagca tttgtattct catcaagcaa cacattgctg gatgtgaggt tcccatgtat 480
gatgttctcc tgggaatgaa ggcagaacaa gccacggcca agcttggtta tttcatcctt 540
gtggccaatc aatgaatggt cat 563

<210> 38
<211> 623
<212> DNA
<213> soybean

<220>
<221> misc_feature
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 38
gattttgcac atctacttga gtaggcttca catgattccg tgtattactt ttatttttgt 60
atatatacca tgtggagtat agtatcactt tttgtcttac aaccacattt tatgagactt 120
gcattttatg tgacatgaac ataaaaata atgaaaaaga aaatgtcaca tatatatgat 180

acaatctttt taaaagtcaa tttgaataat ttttcatcag gaggaaaaag aagagagaaa	240
atgaattaag tttcttctaa aaattaaaat caacttataa aaagaaaaaa ctttaatgaa	300
aaaaattcaa aaagaaaaag aataaaatga tcaatagcct ttaggtttta gcacaagggtg	360
aatccaaata aagaccccaa aagatagtag agaaccac aatggtaaaa tctagaaata	420
tacatgtaaa gactgcattt atagaccatc atgactagca aatgcttaaa ggcacataga	480
tgaattaatc tatgcaacaa aatctgnccc aagttttttt tangcaagga aaatcatatc	540
attttattaa ggataactga gaggaccaat ggtgtaatca attgaaatca tgcgaggctt	600
acatgaaatc tgtcaccaag tac	623

<210> 39
 <211> 785
 <212> DNA
 <213> soybean

<220>
 <221> misc_feature
 <223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 39	
caattaggaa ataaatatat tgaaaagaat tggtagtcag ttcaatgaaa gtgaggctct	60
caaacaactt gatgcagcan ctgtatgata caaaatatat taataactac accagcagaa	120
aaatataggt caatctatat ttgggaacca aataatattt aatttgtatc tgatagactc	180
aagaaattat aactaatttg gaagaaatgg atacctagta ttattaaaac accaaaacac	240
agggcagatt atagtagcta aagaggaaga agctaactag tcaaagtgtc acactattca	300
acactacaaa ggaccaatcc ctttttagag agcctgacct ttctcaccca agagctaccc	360
aagagaatac acaccctctc ctccatatcc cctcccatat aacacaatcc tcaccaacta	420
agcacctacc tgacaattcc ctccaaacca actctctgct catcagggtt gattctcttc	480
tctttccaag actttgggct tttgttttga ctaagccaaa tttctatctg ctggcctggt	540
ccaacagtat cttttacaga caagtttaca aaatattcgt atttggttaga atttattgat	600
attcctatta tgggtcccccac tgtgtgcaaa catttagaaa ctaatattac aattaacagt	660
ttttggtgaa tgcagcaaaa ctaaatatat ttgatataga aatcaacaaa ctgaaaaatt	720
atatngcaag gncaattgga aaagaaaatt gataccctt ttgnggnaat aaatatantg	780
nntac	785

<210> 40
<211> 640
<212> DNA
<213> soybean

<220>
<221> misc_feature
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 40
tggaaggcgt ccttcaattc aatcacaaag tctaaatcaa agacgagggg gctgaaatca 60
tgggggacat tgacaacgta aggtaaccac taattaatta accactaata ttatcccatt 120
aatatcccat taagagataa tacatataga gccataaat aagcatctta acaagacaaa 180
taaattatcc attattcagc ttatgcccat ggtggtatta gaagtttagg aaaaaaaaaat 240
tcatcatttg gcaattttgg gctcattagc ttgaattggt tacaagggtgt ggtatggact 300
tttttctttt cttttctcta aattcttcct tctatgatat acttttggtc aacttaaact 360
caatttctta tagctcaata ttttggattt agattggaaa tatctaaaag nacttaaat 420
tttatattta caaaaaaaaaa aaaagcatcg ntctttttct ttttataaca aagggggatc 480
aaaatcactc tttttatgaa tccgcattat ccttnataat aattaacctc cactgggatt 540
taaaggngga ttaattaaat ccggaggcca tggaaggata tgggggaacc taatctaaaa 600
ntncatcctc aaccctaang ggaaaataaa ggaatngggg 640

<210> 41
<211> 808
<212> DNA
<213> soybean

<220>
<221> misc_feature
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 41
cttttgacac tatgaatagc aattcaaata ttaaataattt ttattttttg tctttgtatt 60
ctattttttc ataaattcta atnttgctaa taatttcaat tcatattaag atcggtaaat 120
agaaaatcta gaaaaaaaaa caaaaaaagt attttttttt cattgatttt attttcaatt 180
gatttgtcac taacaaactg attcctctta aatctcacia aagtacatgt cgatataaat 240
atgagattat aaattcatga tatctatttt cgatttttac atataatgtt ttttttatct 300
tttttagttc ctaataagca tttttaaatg tcttatgttc ctactttgca tatcagggac 360

```
ccattaatgg gacgagggtc actgcgagca tgaacaacgt gtctttcggt ctcccgaaca 420
acgtgtccat cttgcaggct caccacctcg gaatccctgg agtggtcacc actgattttc 480
cggggaagcc gccggtgaag tttgattaca ccggcaatgt gagccggtcg ctgtggcaac 540
ctgttccccg gacaaaggca cacaagttga agtttgggtc cgagggtgca gattgtgttg 600
caggatacta gcattgtcac tcctgagaac caccctatcc atcttcatgg gtcgatttct 660
acattgttgc agagggtttc ggggaacttcg acccaaagaa agatccgca aattcaacct 720
tggtggatcc cctttgaaaa acacagtggc tggcctgtaa atggatgggc aagtattcga 780
tttgggggct gataaccna gtaaatnt 808
```

```
<210> 42
<211> 605
<212> DNA
<213> soybean
```

```
<220>
<221> misc_feature
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
```

```
<400> 42
ctcccggtc ccaagtaata ggccccctcag agccaaaaca ttgggggggc taatttttcc 60
tagaactctg acttctgatt caaattctct atgaccttta gtgatctttt ccctcaatct 120
ctttactgca acttgacttc catcctcaa aatagcctta taaacagntc cataggtgct 180
ctttcccatg atctcagctg gtgcacacaa gagatcatca gctgtaaaag ccattggtcc 240
atcaaatgg actagtttcc ctccagcctc cccacctgct tcaacatcac caccagcaac 300
tggagggact cttttttctg cctcatagtg gccgctctac cctcgggtggc ttggccgntc 360
ccggccttag atgntgatct ctttctgatc aggcagaaaa gcaggacaca acaaagnata 420
atcaggacta cgaggagaac tcctgctact atgagaatta tgnctttggg gcttagcttc 480
ctatgatggg gatggttnga cacttcanga gggggggcaa tgactccctg ggaggagct 540
tgggaaagac atgggggtga aggnctgnac ccacataggn gaaaaattcc cacaangag 600
cnngn 605
```

```
<210> 43
<211> 275
<212> DNA
<213> soybean
```

<220>
<221> misc_feature
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 43
ctgaacggaa gtgactgcgt ttgtgtcggg tgtaagcagg gagtggaggc attatagggtc 60
tcggttttgc tctttactcc tttggcacga tggtgagaat gcttattgtg gtgattcggg 120
gatttgtatt cgagtatggc ggttgtagtg gtgttgctga aggcagcgtt ttgggcggat 180
tggtacgcac gcgccgccat gtagtagcgg gaagggtggct ggtcnccggg gattaagacg 240
tcggcgggtt gcccggggcc cactatgagg acttt 275

<210> 44
<211> 632
<212> DNA
<213> soybean

<220>
<221> misc_feature
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 44
tgtatataat taaaatgagt ttaatattta tgtattaata gtataaaatt tatcatacat 60
gatgaatggg gaaattttga attatgatta aataattata taaaaaaatt tacatgatga 120
atgaataact ttttttttct caattaaaat tatgatcctt tgtcgatatg ttttactgtg 180
tcgacctttt ttttcggggg agagggggacc agtaggagaa gtagtattta gtaaaagaag 240
ggagagagaa gttgacttat cctttaatta gtttagagaa aattagacga gaaggaaaaa 300
aaataggcga aagtcacttt ttctttctat ctctaccaag aatgttgatg aaaaagtggg 360
gagcagaatt ttaaattttt attttcatat ttatccttct ccacattttt ggtttcttcc 420
atttttttat aaaatgattt attttagggc ataggtaact tttcaatttt tttcattcta 480
ttcgatcaaa taaatagaaa aataatttac ttttctttct tttaaccttt ttcattttc 540
tctcataacg accacttatt aattacctct tttnccccac tttttgctat ncaaattctat 600
ctttgaattt cttccttttc attttggctc cn 632

<210> 45
<211> 650
<212> DNA
<213> soybean

<220>

<221> misc_feature
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 45
ttcacagaca tagcaaaatt ctgaagtaag aagcaagttc acgtgtgatg gcgaaaccca 60
ttatagaata tgttagactg aaaggtaaca aattaaata tgttttattg cagaaaccat 120
aaactaataa accttttggg tagatagaaa agtgataaat catacataat aataactgaa 180
atactcagct tttaatcaat ttaattcaat atatatctat ttttgaattt ttcaaagaga 240
tgcttagcta gggaggaaac ctaatttagt ataaaaaaaa gaaacaaatt aaaaacataa 300
attgccattg aatgcctctt aaaatattcc gatccattga tgtctacata ataatatata 360
ttattgatat aataaccgat tgaataaaat ggatatacct attacgtaat agcagatttg 420
tctacgcaa agagacagtc aaagggtgcta attagaaatt aatcgcccca taataaaatt 480
ctaaaccttt gaaaagataa atcaattctc aaaaagattt attttactta tctcagtacc 540
atgcaccatg gatcatctta ctggctcggg tangaatttt caaagctacg ccacaaattg 600
aaattgggct aaaaatcaaa catgcatggg gtcacaacta tattactagt 650

<210> 46
<211> 628
<212> DNA
<213> soybean

<220>
<221> misc_feature
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 46
gaatgcacat tttataaacg tgttgatcct ctccccgnng ggggaccaat taataaggta 60
ccctgttgcc cctaggggac attggatggc catcagatgg tgcataata caccaaagtt 120
tatacagcat tatagtgact ttcaacctcc tcaactcgag gtcccatat attctctcta 180
ttgaacttgt aaagactaat gaacttatga agactatcac tgaaaccac tatggaagcc 240
ccagtagtaa aatggncatg catgctcacc aaaagtatt acagcattat agcgacatac 300
gacctcactc ccaggncac atgctctatn gaacttctaa agctatctcn gaaccctatt 360
atagcttcat gagggttaaca tgcatttttag cgacttagaa aactacatat cattgagcgt 420
gatcnttaag aaggcctcat tttgacacaa aagaacatga tggatttgcc tttatattcg 480
gttactaacc ttgatagcta ttttggnacg agagaaaaat attgacatgc ccgnggaatc 540

aaaaggtaga taatnattaa agagataaag aactatcccc ttgctagggg naaaaaaaaa 600

ntatatccct atttaaataa aanccatc 628

<210> 47

<211> 736

<212> DNA

<213> soybean

<220>

<221> misc_feature

<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 47

tggtgtatat aattaaatg agtttaatat ttatgtatta atagtataaa atttatcata 60

catgatgaat ggtgaaattt tgaattatga ttaaataatt atataaaaaa atttacatga 120

tgaatgaata actttttttt tctcaattaa aattatgac ctttgctgat atgttttact 180

gtgtcgacct tttttttcgg gggagagggg accagtagga gaagtagtat ttagtaaaag 240

aaggagaga gaagttgact taccctttta ttagttttaga gaaaattaga cgagaaggaa 300

aaaaaatagg cgaaagtcac tttttctttc tatctctacc aagaatgttg atgaaaaagt 360

ggggagcaga attttaaatt tttattttca tatttatcct tctccacatt tttgttttct 420

tccatttttt tataaaatga tttatttttag ggcatagtta acttttcaat ttttttcatt 480

tctattcgat caaataaata gaaaaataat ttacttttct ttcttttaac cttttcatat 540

ttctctcata acgaacaact tattaattta cctcttttcc cccacttttg tctatccaaa 600

ttctatcttt gaattttctt ctttttcatt ttggttctca acccaaataa agaagaacga 660

gtttggataa atcataaagg ttatatccc tataantgga agaacattta aatgggtcaa 720

ngggccttaa aattct 736

<210> 48

<211> 695

<212> DNA

<213> soybean

<220>

<221> misc_feature

<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 48

atgccagagc tttccttatc gtggcccccac ctatgaagaa tacacccacg ttgaaataca 60

tgttgttggt gttggacgcg cccagcccga gagggccggt ccacgagtat cccaacgtg 120

catggcgcat gcgcttgaaa cctagtattc atcttcctga tggaggcagc cacgtgtccg	180
acaagggtcaa tgttgccgtt ttcgtgaaaa gggatgataa tgaaaggcac catattgtct	240
tgggcgaggt tgaaaatggc gtcgtgcatg ctcttgtaag gtgccacgtt gatgtaggga	300
agaaccttga ctggcccact tgagttgttg gagtagtttt cgaaggcttg catgatgtgg	360
ttggtgttgg ggtaattcac agacaagaat tttctgcgac cgtgtctatg ttttatggga	420
aggagaatgg gtgcactttt cccacgagct cgataaagggt ggactgcgta naccatatgg	480
gctctnttgc actggggttgc actcttctaa taanggcagn gatgccncnc nccgtttgct	540
tnattatgta cncaacaaac aatgngaaac tctctgnttn ttgggagngc tttggatcgn	600
tctcanntnc ccttnnaata anctttntnn gngnacttnn agggcgangc ttnnncnata	660
tgntaaccac gggngntacn annnnnggnt ntaan	695

<210> 49
 <211> 625
 <212> DNA
 <213> soybean

<220>
 <221> misc_feature
 <223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 49	
tttcccacaa tctttaatct tgctaataat ttcaattcat attaagatcg gaaaatagaa	60
aatctataaa aaaaaacaaa aaaagtatct ttttttcatt gattttatct tcaattgatt	120
tgtcactaac aaactgattc ctcttaaate tcacaaaagt acatgtcgat ataaatatga	180
gattataaat tcatgatate tatttttcgat ttttacatat aatgtttttt ttatcttttt	240
tagttcctaa taagcatttt taaatggctt atgttcctac tttgcatatc agggacccat	300
taatgggacg aggttcactg cgagcatgaa caacgtggct ttcgttctcc cgaacaacgt	360
gtccatcttg caggctcacc acctcggaat ccttgagtg ntcaccactg attttcggg	420
gaagccgccg gtgaagttna attacacccg gcaatgtgag ccgntcgtg gggcaacctg	480
ntcccgggac aaaggcacac aagttgaagt ttgggtcgag ggngcagatt ggggntgcan	540
gatactagca ttgcactcct gagaaccacc ctatccatct tcatggggac caattctaca	600
ttggtgcaga nggttcggg aacnc	625

<210> 50

<211> 621
<212> DNA
<213> soybean

<220>
<221> misc_feature
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 50
actggtgtac gatttagtgt tactagctat cccatgtaat aaatatataa atcttgaatc 60
acaaggaatg atgcaatata tggttcctct aatagtaagt tatccacca aatctgaata 120
taattaagaa gttgtattcg tctgaatggt gtgtctaaaa gggttgattg atgaatgatg 180
gctacatgtg agagtttgat aacaacagct agctagccat tagccaagcc actaactaga 240
cattagtttt ggttggttgt cagacaaacc gttagacctg agaacgaaag cgtattaaac 300
aaaagatgat atgtagactt ttaatatataa aagagatgga gaaaccaaatt tgagatttga 360
taggtgaact ataaatcatg acagtgcatt agacaagttg gtagagtttg ttactaactc 420
atcagattct taagaaaggc aaaaatagaa actacaccac atgtcgctag cgataacgtg 480
caatttataa ataaataatg gcttcatttt catggttagt tataaattaa tgggtcacia 540
ttcttaattt attaggaacg tatacttcat tttagagtg tataaagttg gaagaagaaa 600
agggatatag aaagaataaa a 621

<210> 51
<211> 480
<212> DNA
<213> soybean

<220>
<221> misc_feature
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 51
aagctccgcg cggggaacct nnagagtcta cctgaatccc caagntngaa cgaataacttg 60
ccaacacaaa tacgggcatg gggaaacatc tgaagaccgc tccaaagcgc cncataactaa 120
attggnagga aaatttatat ctgacctttc atgggtgggg ggtgcatctg ctataaggaa 180
gggttcattc tgggcaagat ctgtggaaaa caatattggg gatcaaattt tagggagtga 240
tgctacaacc tcttcattat acatggattc tgaaataagt ggtgtgaact ttaaagtga 300
cgaagacggc atgcaaatgc ctggtattca tctagttgat ttatttgaga ctgacaccaa 360
tacaagcggc gataaacatg attcccacta tgatgaagng ccatcatctt atgggtttga 420

gggcttacga cgatccaaac gtaggaacat acaacctgaa ccgntactct gattggggga 480

<210> 52

<211> 480

<212> DNA

<213> soybean

<220>

<221> misc_feature

<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 52

aagctccgcn cggggaacct nnagagtcta cctgaatccc caagntngaa cgaataacttg 60

ccaacacaaa tacgggcgat gggaaacatc tgaagaccgc tccaaagcgc cncataactaa 120

attggnagga aaatttatat ctgacctttc atgggtgggg ggtgcatctg ctataaggaa 180

gggttcattc tgggcaagat ctgtggaaaa caatattggg gatcaaattt tagggagtga 240

tgctacaacc tcttcattat acatggattc tgaaataagt ggtgtgaact ttaaagtgaa 300

cgaagacggc atgcaaatgc ctggtattca tctagttgat ttatttgaga ctgacaccaa 360

tacaagcggc gataaacatg attcccacta tgatgaagng ccacatctt atgggtttga 420

gggcttacga cgatccaaac gtaggaacat acaacctgaa ccgntactct gattggggga 480

<210> 53

<211> 736

<212> DNA

<213> soybean

<220>

<221> misc_feature

<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 53

aatttattta gttgatataa ccactttcaa aaatctgact tacaagactc tttagaattc 60

ataatagtga cacttgatta agttagatta gactttataa aacacgagtt tgattttttt 120

tttaataata attaaggttc tagcttatat atattatata gttgatatag actactttca 180

aaagtctgac ttaaaagtct ctttagtata cataataata taacctttta atttagttaa 240

aaaatttgtc cctaaataaa ttaataaatc caaacttata tacaagttaa taggcttaag 300

tcttaaaaaa ataatatata tatatatata taaagcatta aaacatttca atgaaaacaa 360

tataataata ataataataa atatattatt gttattaatt catagatttt attattacta 420

ttatagaata atttgtgtgt atatataata atatatagag agagagaggg tcattttata	480
tgagtgagaa aatttaaata ttattatgaa ttttcaaaat taaaatcaca tgccatatga	540
ttttcttaaa aaattacgta actttttttt ttacaaaagt aatcatatgg ttttaaaaac	600
taatttaaata aacttatata taactatatc agntaaaatt ngggtcataa aataagtata	660
tcagntatth taaaaaaatt ataagtnthc ataaataaat accaaatgat agtcccaggn	720
gatgggncag cttng	736

<210> 54
 <211> 642
 <212> DNA
 <213> soybean

<220>
 <221> misc_feature
 <223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 54	
ttaactttac acaacacacc accagagtgt aagctgtttc ataaaaaatg attgtttcgg	60
gctttcggat cacaaggctt gtttagtatt cggtaaagaaa gaaagaaata ggtgataaat	120
aaagtggata gaaacataaa agaaaggaat aaagtaatga aaataaggga gaagtagaat	180
aatggaaata gataagaaat agaatggatt cgatagtata tctagtthaa gagaaataag	240
aaaaaataag aacaagaaaa aaaattgcat tttaatthtatt tttttgtact gtatcgatga	300
ttggcacgag attataagtt ttttttttcg tgtttacgth gaaggattat atatcatacc	360
attgttttgt caaccaacac ggaactthaa gtctcttgat gttcaaaagc acttaaaact	420
aaggaattht acatcatatt agtcgctgta gactgatata ggattthtaag cctatatatc	480
tagcattgat cgggtgtcaa tcaatatcac attaatgatc ggtaaaccat tcatataacc	540
cctttgattg gtcaagaaat ggctthtata atncccagga ttgagcccag aagacaggtg	600
atactaggth caattcatgg ttttaggata ggctcgtaaa cc	642

<210> 55
 <211> 659
 <212> DNA
 <213> soybean

<220>
 <221> misc_feature
 <223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

```

<400> 55
aaaaggacct aaaagcaaaa agaaaattga gtatccttag gaattaaaaa tattccaata      60
aaaataaaat aaagatccaa atgatagtgg gataaccgaa gaggaatgtc tttcaaccac      120
tgcctgaccg ccaccactgc caacagccta gtatcaaccg aatccacata taccaacaat      180
cttcagacaa acacttctaa gttggtgctg aagagacaat atctcatggg tagatcaaata      240
taagagtgct accaataaca aaatcgggat catttgacta acaaacagtt atgtgcattg      300
gatgttctac catagtacat tgctttatgt gaaattcttt taattattca atattgacat      360
gntcttatat atatatatat atatatatat atatatatat atatacaggg gattgnatta      420
tctctgaaaa aagattttat cataaaatca taatgatttc tcataatgna tctttacatt      480
ttaaaggtag ataaataaaa ttgattttaa tnggnagata taattaaaat acataattaa      540
tatgactttt aaccaaattg atatataaac acttaaaaaa aagttcatga acgnccgggg      600
ngnattggnt ggncaaaaaa aaaattaata ctatcaacct aattaaaaat tattttatan      659

```

```

<210> 56
<211> 805
<212> DNA
<213> soybean

<220>
<221> misc_feature
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

```

```

<400> 56
ccaatgccag agcttcctta tcgtggggccc cacctatgaa gaatacacccc acgttgaaat      60
acatgttggt gttgttggac ggcgccagcc gagagtgccg gtccacgagt atccccaacg      120
tgcattggcg atgcgcttga aacctagtat tcattctcct gatggaggca gccacgtgtc      180
cgacaaggtc aatgttgccg ttttcgtgaa aagggatgat aatgaaaggc accatattgt      240
cttgggagag gttgaaaatg gcgtcgtgca tgctcttgta aggtgccacg ttgatgtagg      300
gaagaacctt gactggccca cttgagttgt tggagtagtt ttcgaaggct tgcattgatg      360
ggttggtggt ggggtaattc acagacaaga attttctgcg accgtgtcta tgttttatgg      420
gaaggagaat ggggtgcactt ttccccacga gctcgataag gtggactgcg tagacgcata      480
tggggctctc ttgcactggg ttgcactctt ctaataaggc agtgatgcca cgcacgtttg      540
ctttcattat gtacacaaca aaacaatgtg aaaactctct gtttcttgga ggtgctttgg      600
atcgttctcn agttcccctt cgaataagct ttctgcgtgn tacttcnagg ggcnnatgct      660

```

ttgtaccaat atgnttancc caagggngnt tnccattncn ggtctttact accacnacat	720
aacacccnat tnnttgaann gnancnate caacntctac naaancgtna tcaatnacnt	780
tnnattn gat ttganncaact ggccn	805

<210> 57
 <211> 632
 <212> DNA
 <213> soybean

<220>
 <221> misc_feature
 <223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 57	
tttagaattc ataatagtga cacttgatta agttagatta gactttataa aacacgagtt	60
tgattttttt tttaataata attaagggtc tagcttatat atattatata gttgatatag	120
actactttca aaagtctgac ttaaaagtct ctttagtata cataataata taacctttta	180
atttagttaa aaaatttgct cctaaataaa ttaataaatc caaacttata tacaagttaa	240
taggcttaag tcttaaaaaa ataatatata tatatatata taaagcatta aaacatttca	300
atgaaaacaa tataataata ataataataa atatattatt gttattaatt catagatttt	360
attattacta ttatagaata atttgtgtgt atatataaa atatatagag agagagaggg	420
tcattttata tgagtggaaa aattttaaata ttattatgaa ttttcaaaat taaaatcaca	480
tgccatatga ttttcttaaa aaattacgta actttttttt ttacaaaagt aatcatatgg	540
ttttaaaaaac taattttaat aacttatata taactatatc agttaaattt gggtcataaa	600
ataagtatat cagttatttt acaaaattat aa	632

<210> 58
 <211> 437
 <212> DNA
 <213> soybean

<220>
 <221> misc_feature
 <223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 58	
cttttgacac tatngaatac gaattcgaat gtcggagcgt gcagatacga gggtagagctt	60
gttttaggttt gttatcgtga acaagaaacc gtgtgggtgt aaaattattt tgacaagaga	120
agagcgtgaa gaggaagagg aagataccat gttggacgag gggttaattg acgagttcaa	180

gagcatgaaa tatggcattg gtaacgtttg ttggtacgag attacggtgg acgatggggt 240
ggaggtgttg gaagcagtgc atagtgttga aggaaactat gatcttgtga tgggtgggaag 300
gcgccacaat gatggatctt tgaatggaaa agaaatgaca actttcatgg agaacgctga 360
tgcattggga atattgtggg atatgttccc ttccccanc ntgnntggcn tngttccgct 420
tttttcgnct ntnngcc 437

<210> 59
<211> 681
<212> DNA
<213> soybean

<220>
<221> misc_feature
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 59
ggnttcttta gggcttcaaa atttgatcct agatcataac ttttttcact ggtgacgttc 60
ctgcttcttt gggtagctta agagagctca atgagatttc ccttagtcat aataagttta 120
gtggagctat accaaatgaa ataggaaccc tttctaggct taagacactt gacatttcta 180
ataatgcctt gaatgggaac ttgcctgcta ccctctctaa tttatcctca cttacactgc 240
tgaatgcaga gaacaacctc cttgacaatc aaatccctca aagtttaggt agattgcgta 300
atctttctgt tctgattttg agtagaaacc aatttagtgg acatattcct tcaagcattg 360
caaacatttc ctgcttagg cagcttgatt tgcactgaat aatttcagtg gagaaattcc 420
agtctccttt gacagtcaag cgcagctaaa tctcttcaat ggcttctaca atagcctctc 480
agggtctgcc cccctctgct tggcaagaaa tttaactcaa gctcatttgt gggaaatatt 540
caactatgtg gggtagagcc ttcaaccca tggctttcca agctncatca caagggggca 600
ttggccccct cctgagnggc aaacatcacc atcataggaa gctaaccca aagacataat 660
tctcatagta nccaggaggt n 681

<210> 60
<211> 644
<212> DNA
<213> soybean

<220>
<221> misc_feature
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 60
acaacaagca acgaacagct ttttaacctta aactagggcta atgccaatat taaagaagaa 60
ataattaaaa ttgtaaggct ggtcgtgtat aaattaaaca aaaggccctc tattcaaacc 120
ttcatatatac atacctgttt ttaattaacg cggactactt tttcatataa aaaaaagatc 180
attagaggat taatttaaag cgttttagtt ttttaattacc aaagagtata attattatta 240
ggcgctttgt cccacaatca atcacctaaa caagaaaaag aaaaagaaaa aaaaagtcaa 300
attggactaa tgcaaaagtg gcacaatctt tgtcttgaac tctttaatta gcaacaaatt 360
atactcttct gcacaaatca caagaatacc ttacatgaaa agaattggtaa tttgacgggt 420
tacattaaat tatatgcagt tttctgcagg taattaattt tcaagaattt aagggtgggt 480
ggtaattttc aatagctagc ttgactagca aaggaaagaa taaaggtaaa atgcttcttg 540
gtttggcctt ttggattggg atactttttg ctaaaccggaa atgggttatat gaatggtaaa 600
ggagataaat tggtagatag ctaaaatggg atagncttaa tccn 644

<210> 61
<211> 678
<212> DNA
<213> soybean

<220>
<221> misc_feature
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 61
aaattcattt aactttctcta attttttaa atcgatcaaatt tgggtttttca atctaaaata 60
taagaaacta tattttgtga tgggttttaa atcgacatta agtggttctta atctaccaca 120
aaaagcacat ttccaaaaaa ataaattaat tttaaaaatt ataagatcaa attgaatcaa 180
ttttaaaaat taaaatatta aattgaaaaa aaaaataaag gatcaaattg aacataaata 240
ataaatttga ggattaaaaa actaatttaa cctttaattt tttctcactt atattaatat 300
taaaaaatta tattgatttt cctaataact ccttatctca attaaaattt ccaaaaatta 360
attctagcat cttcaaacac tactcaccat gaaagttcat cacaaccatc tttctttctc 420
ttttctctac atcatgtttt cgcttcgcaa actttattgt gttcctagtc ttagacgtct 480
gataatcttc cacaagtatt gaactataac acttattgga cttgcaccgg taatagctaa 540
caccaaatga gacgtgcact tgacttttat atcactaaga aaatttcaac acattgacca 600
agattagctc catcttgctt taacacttgg ttgactagtc acttaagtgc aacaaccact 660

ttgatatcat tgggtgga

678

<210> 62
<211> 571
<212> DNA
<213> soybean

<220>
<221> misc_feature
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 62
tcttttaaga ccattcgaca ctatagaata cgaattccat aattaacaat aaagtcattct 60
tctattatat attttttctt cttaaattac atgatagtat ttcattcatta ttgacaata 120
atgatatttt tatctcataa atattatttt gttttaaaaa tattcatagc acacacgagt 180
tttttatatc aacaaagagg tatcacttca gttggtcaat ttggtctaac ttttagacaa 240
tgtcgtatag ttgaattgaa ttggaatttg gcagtatata ttttactttt tgccccctta 300
ttttcaatca aattagagta gacgcctcgt attattggca tacatggata ttggatcggc 360
acctgtgttt cagacctgag tcacatctga ctcgatcgga ttttatctta catgaaaatt 420
ccaaaataat gaaagatatg gcaattggca ccatgtaact ctatggacac caatgcttca 480
ccgtagagct ctaaatttcg aggccttcta tatatagctt tgcgtgacta tgtnaaatta 540
ntcaatatch tnttaatttt tttgnggccc c 571

<210> 63
<211> 856
<212> DNA
<213> soybean

<220>
<221> misc_feature
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 63
aattagttgt cttgtttatt cattaccttt tcaatttttt taatcaccat aattaaggcc 60
tttcgaatcc ctttaagtga taaaagaaac gtgcaattat gcgaacaaat aaattttcgt 120
tatgttacta tttagtcaag gaggaaaaaa aagtgataag ggaagaaaca agggatatatt 180
cctgttataa caaacttaaa atggcgacta ttttgacgac attgcaaata ctcatagtac 240
gatataaatt ttgaatttaa tatacaatga ataggcatat tcatttttcta ccccaaaaaa 300

```
gcatactcat ttatgtacat ttaattttct ctccatagag gaattaatgt acaaccatgc 360
ataagggatg agcgaaaggg acagattatt gcaatccaga agcatccaag gaaagttgga 420
taaacaaatc aattaatata tataaaaaaa aaacaaaaat gctcctagta gaagattaaa 480
ggaagagttg gctatatatg gcaaaccctt ttacttggt ttaccctctt ctcatcacc 540
gcattgcac accaatacgg gaacttttcc cattacaaaa ctcatggaa gccaacatat 600
cccccaaat tccactggat ctgcattgtc catgaaattt gacatttctt cttctacaaa 660
attcccatgc tatgtcgttt tccaccatcc taggtcatag tccttcttca ttccccgaat 720
cgnttcacac ttgtatgcaa tcttccaccc cagcctcatg ggaaacaccg ntaacactat 780
cactctaata tcattcttgg cataaaactc totataaacc tctcgncac gggtctctta 840
aattctcatc ttnttn 856
```

```
<210> 64
<211> 639
<212> DNA
<213> soybean
```

```
<220>
<221> misc_feature
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
```

```
<400> 64
tcccctttgg gtcccaagta ataggccctc agagccaaaa cattgggggtg tctaattttt 60
cctagaacac tgactttctga ttcaaattct ctatgacctt tagtgatctt ttccctcaat 120
ctctttactg caacttgact tccatcctcc aaaatagcct tataaacagt tccataggtg 180
ctctttccca tgatctcagc tgttgccacac aagagatcat cagctgtaaa agccattggt 240
ccatcaaat ggactagttt cctccagcc tccccacctg cttcaacatc accaccagca 300
actggaggga ctcttttttc tgtcctcata gtggccgctc taccctcggg ggcttggccg 360
tccggcctt agatgttgat ctctttctga tcaggcagaa aagcaggaca caacaaagta 420
taatcaggac tacgaggaga actcctgcta ctatgagaat tatgtctttg ggcttagctt 480
ctatgatggt gatggtttga cacttcagga ggtggggcaa tgactccttg tgatggagct 540
tgggaaagac atgggggtga agggctggac ccacatagtt gaatatttcc acaaatgagc 600
ttgagttaaa attcttggca agcananggg ggacagaan 639
```

```
<210> 65
<211> 495
```

<212> DNA
<213> soybean

<220>
<221> misc_feature
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 65
ttcccaatgc cggagcttcc ctatcgtggg cccacctat gangaataca ccctcgaatg 60
aaatacatgt tgttgntgnt ggacgcgccc agccgagagt gccggtccac tagtatcccc 120
aacgtgcatg gcgcatgcgc ttgaaaccta gtattcatct tcctgatgga ggcagccacg 180
tgtccgacaa ggtcaatggt gccgttttcg tgaaaagga tgataatgaa aggcaccata 240
ttgtcttggg cgaggttgaa aatggcgctg tgcattctct tgtaagggtc cacgttgatg 300
tagggaagaa ccttgactgg ccacttgag ttgttgaggt agttttcgaa ggcttgcatt 360
atgtggttgg tgttggggta attcacagac aagaattttc tgcgaccggg tctatgtttt 420
atgggaagga gaatgggtgc acttttccca cgagctcnat aagggggact gcntanacnc 480
atatggggct ctctt 495

<210> 66
<211> 480
<212> DNA
<213> soybean

<220>
<221> misc_feature
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 66
cnttcttaga atcgaattct ttggtatcag aacatattcag tcatttttaa agaataagaa 60
attaaattag acttaatttt taagagtatg gattaaaatg taaaatttgt ggggattata 120
aacataaata agtaattttt cctatatgag acattttattg aaatcttaag ataagatacg 180
tacatgcaaa ttaaattgat gcatgataat agaattaggt gaatagtcca atacctgaca 240
cctctttggg ccgaagtttt tggggcactt cttgatacct aaaccacag tgaagaagag 300
gctctgggtc atttcagtgg gtacttcaac ttttctaggg cttctgaagc ttttgctgaa 360
ggaagtgact gcgttttgtt ccgttgtaag cagggagtgg aggcattata ggtttggttt 420
tgttctttac tcctttggca cgatgggtgag aatgcttatt gtggtgattc ggtgatttgt 480

<210> 67

<211> 669
<212> DNA
<213> soybean

<220>
<221> misc_feature
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 67
atgcccaaaa aatttaccta aaagcaaata aaaaagatga gtatttccttt taaattaaaa 60
atattttaat aaaaataaaa taaagatcca aatgataatg tgataaccga agaggaatgt 120
ctttcaacca ctgcctgacc gccaccactg ccaacagcct agtatcaacc gaatccacat 180
ataccaacaa tcttcagaca aacacttcta agttggtgct gaagagacaa tatctcatgg 240
gtagatcaaa ttaagagtgc taccaataac aaaatcggga tcatttgact aacaaacagt 300
tatgtgcatt ggatgttcta ccatagtaca ttgctttatg tgaaattcctt ttaattattc 360
aatattgaca tgggtcttat atatatatat atatatatat atatatatat atatatacga 420
gggattgtat tatctctgaa aaaagatfff atcataaaat cataatgatt tctcataatg 480
gatctntaca ttttaaaggt agataaataa aattgatttt aaatngggag atataattaa 540
aanacataat taatatgact ttttaacaaat tgatatataa aactttaaaa aaaagntcca 600
tgacgcacng ggggnattgg tgggacaaaa aaaattatct atcactaatt aaaantatta 660
taaatan 669

<210> 68
<211> 486
<212> DNA
<213> soybean

<220>
<221> misc_feature
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 68
tggtgtatat aattaaaatg agtttaatat ttatgtatta atagtataaa atttatcata 60
catgatgaat ggtgaaattt tgaattatga ttaaataatt atataaaaaa atttacatga 120
tgaatgaata actttttttt tctcaattaa aattatgatc ctttgtcgat atgttttact 180
gtgtcgacct tttttttcgg gggagagggg accagtagga gaagtagtat ttagtaaaag 240
aaggagaga gaagttgact ttccttttaa ttagttttaga gaaaattaga cgagaaggaa 300
aaaaaatagg cgaaagtcac tttttctttc tatctctacc aagaatgttg atgaaaaagt 360

ggggagcaga atttttaaatt tttatttttca tatttatcct tctccacatt tttgntttct 420
tccatttttt tataaaanga tttatttttag gcatagntaa cttttcaatt tttttcattt 480
ctattc 486

<210> 69
<211> 779
<212> DNA
<213> soybean

<220>
<221> misc_feature
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 69
tatttgtaaa ttgtttttta taattgaaaa gaaaataagg tttaaattatt ttcataataa 60
aaatttaatt tgttcttata agttattttg aaaattttat taaaataagt tgaaaacaat 120
ttataaataa atcataaact ataattttat aagttttctt aaatacttac acgtatgcca 180
taaaataagt tcagataaga tataaataaa ttcttccaaa cacatcttaa atctatatatt 240
ttttaaaaca aactttcatc gttaaaagga tattataata ataataataa acttcaatca 300
ttaacaatta atatatgtgg ataaaagagc attcaaaatg atattttatt agcacatgac 360
aatcacatt actctcaagc tattttttta aactaataaa aacttacata ttatatgata 420
tgatatatac tctctctata ttacacttt tttgagataa acaaggataa aaaatgatgt 480
aatatgacc gcatataata ttatttataa tgtacggaat gccgtttttg acattttata 540
taatatatct gggggcaatt attttcttaa ccaataatta gcaaattttt atcttgcttt 600
ttctccatgg gggctaaatt aaactaaagg gncgtaccca atccagtccc actttttttt 660
aaataattnn tttcntccc acttagnaaa ggagtnnttn ggcttaaatn ggcagnncca 720
ttaaccataa gcctttntgg taaggagtct taccaantaa aatggggaag gccccccc 779

<210> 70
<211> 677
<212> DNA
<213> soybean

<220>
<221> misc_feature
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 70

ttattggctt aacttgagtt tcaactcctt ctctggctct ttaccagcta gcctaactca	60
ctcattttct ctcaacttttc tttctcttca aaataacaat ctttctggct cccttcttaa	120
ctcttggggg ggggaattcca agaatggctt ctttaggctt caaaatttga tcctagatca	180
taactttttc actggtgacg ttcttgcttc tttgggtagc ttaagagagc tcaatgagat	240
ttcccttagt cataataagt ttagtggagc tataccaaat gaaataggaa ccctttctag	300
gcttaagaca cttgacattt ctaataatgc cttgaatggg aacttgctg ctaccctctc	360
taatttatcc tcacttacac tgctgaatgc agagaacaac ctcttgaca atcaaattccc	420
tcaaagttta ggtagattgc gtaatcttct tggtctgatt ttgagtagaa accaatttag	480
tggacatatt ccttcaagca ttgcaaactt ttctctgctt aggcagcttg atttgcactg	540
aataatttca gtggagaaat tccagctcct ttgcagtcag cgcagctaaa tctcttcaat	600
ggttcttaca atagcctctc anggtctgtc cccctctgc ttgccaagaa atttaactca	660
agctcatttg tgggaat	677

<210> 71
 <211> 571
 <212> DNA
 <213> soybean

<220>
 <221> misc_feature
 <223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 71	
tgggactggc tgtgactgat ctctctggtc taatctcttc cagctgctgg agaacttgat	60
gaacttctgg tcgtgctgat ggagaaggat caacacagtg caaagcgagc ttcaacgtgt	120
ttagcaactc gtcgccaact gtggatgcat ctctcatcaa gtctgcatca aaaacctcat	180
ttgtccactc ctctttgaca actgaggcaa cccactgagg caaatctagt ccattcatag	240
acaccccagg tgatttcctc gttaggagtt ctaacaagat aacaccaaga ctgtagatat	300
cagtttttagt gtttgcttct ttgagctttg agagctcagg tgcccgggtat cccaatgctt	360
cagctgtagc tatcacgttg gaattagcag cagttgacat caaccgagaa agacccaaat	420
ctgcaatttt agcatttгна ttctcattaa acaacacaat gntggatgng anggtncat	480
ggatgaaggc cttctnggna agnaagnaaa acaaagcacc gggccaaggc ttgggctaata	540
ttcaaccttg gggggcaaac naanaaatgt t	571

<210> 72
<211> 756
<212> DNA
<213> soybean

<220>
<221> misc_feature
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 72
attggcttaa cttgagtttc aactccttct ctggctcttt accagctagc ctaactcact 60
cattttctct cacttttctt tctcttcaaa ataacaatct ttntggctcc cttntaact 120
gtgggggggg gaatancaag gngggcttta ggctgcaaaa tttgatccta gatcataact 180
ttttcactgg tgacgttctt gcttctttgg gtagcttaag agagctcaat gagatttccc 240
ttagtcataa taagtttagt ggagctatac caaatgaaat aggaaccctt tctaggctta 300
agacacttga cattttcta atgccttga atgggaactt gcctgctacc ctctctaatt 360
taccctcact tacactgctg aatgcagaga acaacctcct tgacaatcaa atccctcaaa 420
gtttaggtag attgcgtact ctttctgtt ccgattttga gtagaaacca atttagtgga 480
catattcctt caagcatngc nnacatttcc tcgcttaggc agcttgattg tcaactgaata 540
atttcaggtg gagaaattnc agtctncttt gacagtcagc gcagtctaaa tcttcttcaa 600
tggttntctac aataggcctc tcagggctctg gcccccttt gnttggccaa ggaaanttaa 660
cttaagctta tttgngggg aaanattcaa ctatgggggg acncggccct ttaaacccca 720
gggnttttcc caggttcctt ccaagggngc anttgt 756

<210> 73
<211> 557
<212> DNA
<213> soybean

<220>
<221> misc_feature
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 73
tgtgactgat ctctctgggc taatctcttc cagctgctgg agaacttgat gaacttctgg 60
tcgtgctgat ggagaaggat caacacagtg caaagcgagc ttcaacgtgt ttagcaactc 120
gtcgccaact gtggatgcat ctctcatcaa gtctgcatca aaaacctcat ttgtccactc 180
ctctttgaca actgaggcaa cccactgagg caaatctagt ccattcatag acnccccagg 240

tgatttcntc gttaggagtt ntaacaagat aacaccaaga ctgtagatat cagtttttagt	300
gtttgctttc ttgagctttg agagttaagg gncccggant cccanngntc nagttgnagt	360
tatancgttg gaattagcag nagttgcntc aaccgaaaaa gaccaaatac tgaatttttag	420
catttgtttt tcatcaagca acacattgnt ggatgngagg tcccatgtat gatgttctcc	480
tgggaatgaa ggcaaacaag cccgggccaa ggcttgggct attttaatcc ttggtggcca	540
aacaatgaaa ggttnat	557

<210> 74
 <211> 673
 <212> DNA
 <213> soybean

<220>
 <221> misc_feature
 <223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 74 gggactggct gtgactgac tctctggtct aatctcttcc agctgctgga gaacttgatg	60
aacttctggt cgtgctgatg gagaaggatc aacacagtgc aaagcgagct tcaacgtgtt	120
tagcaactcg tcgccaaactg tggatgcac tctcatcaag tctgcatcaa aaacctcatt	180
tgtccactcc tctttgacaa ctgaggcaac ccaactgaggc aaatctagtc cattcataga	240
caccccaggt gatttcctcg ttaggagttc taacaagata acaccaagac tgtagatata	300
agtttttagtg tttgctttct tgagcttttg agaagctcag gtgcccggta tcccaaattgc	360
ttccagctgt agcttatcac cgttgggaat taagcagcaa gttggacatt caaccggag	420
naaaagaccc aaaaattttg caaattttta agcaatttng gnanttcttn aatcaaggcc	480
aaccaccaat tggnttggga atggtggaag ggtttcccca atggtaattg gaagggtttc	540
ttccctnggg gaaaatggaa aggggcaana aaacaaaggc ccaacngggg ccccaaagg	600
nttttggggg ccttattttt tncnaatncc ctttggnggg ggncccaaatt tcnaaantgg	660
aaattgntt tnn	673

<210> 75
 <211> 602
 <212> DNA
 <213> soybean

<220>
 <221> misc_feature
 <223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 75
aggctagctg gtaaaggacc agagaaggat ttgaaactca agttaagcca ataaagctta 60
gtggaattag caagactata agggattgct cctgtgagca agttgttgct gaggtcaaga 120
gactgaagca aagggcagaa acctaaagaa agaggtatgg aacctgtaag cctattgttg 180
aataactgaa cccctctaag gttgggaaga agtcccaaag ttgaagggat tgaaccacca 240
atttggttat catgaagact aagcttcctg aggccttgaa gttggccaat tttggcggtg 300
attcgacccc tcaaaccctt ccaaggaagc tggatcacia taacctgtcc ctgagcacac 360
ttgattccaa cccaacctcc ggaacaagct ccatagccac tggcattcca gctcccgcaa 420
gaacccttct ggatcagcca actcttgctt gaaagcttat cacatgtacc tctctacaga 480
taggaggggtg cttcttcctt ttcactggnc tacctcttcg ggaataagcc acctaagtag 540
aaagaaagan ctgggatagc taactctaca tagnctcaag gcnaagagata attagggaaa 600
ng 602

<210> 76
<211> 748
<212> DNA
<213> soybean

<220>
<221> misc_feature
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 76
attggcttaa cttgagtttc aactccttct ctggctcctt accagctagc ctaactcact 60
cattttctct cacttttctt tctcttcaaa ataacaatct ttctggctcc cttcctaact 120
cttgggggtg gaattccaag aatggcttct ttaggcttca aaatttgatc ctagatcata 180
actttttcac tggtgacggt cctgcttctt tgggtagctt aagagagctc aatgagattt 240
cccttagtca taataagttt aatggagctg taccaaataa aataggaacc ctttctaggc 300
ttaagacact tgacatttct aataatgcct tgaatgggaa cttgcctgct accctctcta 360
atttatcttc acttacactg ctgaatgcag agaacaacct ccttgacaat caaatccctc 420
aaagttagg tagattgcgt aatctttctg ttctgatttt gggtagaaac caatttagtg 480
gacatattcc ttcaagcatt gcaaacattt cctcgcttag gcagcttgat ttgcactgaa 540
taatttcagt ggagaaattc cagtctcctt tgacagtcaa gcgcaagtct aaatctcttc 600

aatgtttcct acaatagcct ctcanngtct gncccccctc tgcttgccaa gaaattttaac	660
tcaagctcat ttgtgggaaa tattcaacta tgtgggacag nccttcaacc ccatgttttn	720
ccaagcttca tacaaggagc atggccct	748

<210> 77
 <211> 563
 <212> DNA
 <213> soybean

<220>
 <221> misc_feature
 <223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 77	
ctggctgtga ctgatctctc tgggtctaate tcttccagct gctggagaac ttgatgaact	60
tctggctctg ctgatggaga aggatcaaca cagtgc aaag cgagcttcaa cgtgttttagc	120
aactcgctgc caactgtgga tgcattctctc atcaagtctg catcaaaaac ctcatattgtc	180
cactcctctt tgacaactga ggcaaccac tgaggcaaat ctagtccatt catagacacc	240
ccaggtgatt tctcgttag gagttctaac aagataacac caagactgta gatatcagtt	300
ttagtgtttg ctttcttgag ctttgagagc tcaggtgccc ggtatcccaa tgctccagct	360
gtagctatca cgttggaatt agcagcagtt gacatcaacc cgagaaagac caaaatctgc	420
aatttttagca tttgtattct catcaagcaa cacattgctg gatgtgaggt tcccatgtat	480
gatgttctcc tgggaatgaa ggcagaacaa gccacggcca agcttggtta tttcatcctt	540
gtggccaatc aatgaatggt cat	563

<210> 78
 <211> 623
 <212> DNA
 <213> soybean

<220>
 <221> misc_feature
 <223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 78	
gattttgcac atctacttga gtaggcttca catgattccg tgtattactt ttatttttgg	60
atatatacca tgtggagtat agtatcactt tttgtcctac aaccacattt tatgagactt	120
gcatttttatg tgacatgaac ataaaaaata atgaaaaaga aaatgtcaca tatatatgat	180
acaatctttt taaaagtcaa tttgaataat ttttcatcag gaggaaaaag aagagagaaa	240

atgaattaag tttcttctaa aaattaaaat caacttataa aaagaaaaaa ctttaatgaa 300
aaaaattcaa aaagaaaaag aataaaatga tcaatagcct ttaggtttta gcacaagggtg 360
aatccaaata aagaccccaa aagatagtagc agaaccacaac aatggtaaaa tctagaaata 420
tacatgtaaa gactgcattt atagaccatc atgactagca aatgcttaaa ggcacataga 480
tgaattaatc tatgcaacaa aatctgnccc aagttttttt tangcaagga aaatcatatc 540
attttattaa ggataactga gaggaccaat ggtgtaatca attgaaatca tgcgaggcctt 600
acatgaaatc tgtcaccaag tac 623

<210> 79
<211> 605
<212> DNA
<213> soybean

<220>
<221> misc_feature
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 79
ctcccggtgc ccaagtaata ggccctcag agccaaaaca ttgggggggc taatttttcc 60
tagaactctg acttctgatt caaattctct atgaccttta gtgatctttt ccctcaatct 120
ctttactgca acttgacttc catcctcaa aatagcctta taaacagntc catagggtgct 180
ctttcccatg atctcagctg gtgcacacaa gagatcatca gctgtaaaag ccattgggtcc 240
atcaaaatgg actagtttcc ctccagcctc cccacctgct tcaacatcac caccagcaac 300
tggaggggact cttttttctg cctcatagtg gccgctctac cctcggtggc ttggccgntc 360
ccggccttag atgntgatct ctttctgac aggcagaaaa gcaggacaca acaaagnata 420
atcaggacta cgaggagaac tcctgctact atgagaatta tgnctttggg gcttagcttc 480
ctatgatggg gatgggttnga cacttcanga gggggggcaa tgactccctg ggaggagct 540
tgggaaagac atgggggtga aggnctgnac ccacataggn gaaaaattcc cacaangag 600
cnngn 605

<210> 80
<211> 711
<212> DNA
<213> soybean

<220>
<221> misc_feature

<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 80

```
ttaangncca acgactcact atagggcgaa ttgggcccga cgtcgcatgc tcccggccgc      60
catggccgcg ggattggctt aacttgagtt tcaactcctt ctctggctct ttaccagcta      120
gcctaactca ctcatTTTTt ctcacttttC tttctcttcn taaaataaca atctttctgg      180
ctcccttctt aactcttggg gtgggaattc caagaatggc ttcttttaggc ttcaaaattt      240
gatcctagat cataactttt tcaactggta cgttcctgct tctttgggta gcttaagaga      300
gctcaatgag atttccctta gtcataataa gtttagtgga gctataccaa atgaaatagg      360
aaccctttct aggccttaaga cacttgacat ttctaataat gccttgaatg ggaacttgcc      420
tgctaccctc tctaatttat cctcacttac actgctgaat gcagagaaca acctccttga      480
caatcaaatc cctcaaagtt taggtagatt gcgtaatctt tctgttctga ttttgagtag      540
aaaccaattt agtggacata ttccttcaag cattgcaaac atttcctcgc ttaggcagct      600
tgatttgta ctgaataatt tcagtggaga aattccagtc tcctttgaca gtcagcgcag      660
tctaaatctc ttcaatgttt cctacaatag cctctcaggg tctgtcccc n              711
```

<210> 81

<211> 716

<212> DNA

<213> soybean

<220>

<221> misc_feature

<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 81

```
ttnntgaaaa ccctttgcta tttaggtgac actatagaat actcaagcta tgcaccaaac      60
gcgttgggag ctctcccata tggtcgacct gcaggcggcc gcactagtga ttaatacgac      120
tcactatagg gctcgagcgg ccgcccgggc aggtgggact ggctgtgact gatctctctg      180
gtctaattctc ttccagctgc tggagaactt gatgaacttc tggtcgtgct gatggagaag      240
gatcaacaca gtgcaaagcg agcttcaacg tgtttagcaa ctctcgcca actgtggatg      300
catctctcat caagtctgca tcaaaaacct catttgctca ctctctttg acaactgagg      360
caaccactg aggc aaatct agtcattca tagacacccc aggtgatttc ctcggttagga      420
gttctaacaa gataacacca agactgtaga tatcagtttt agtgtttgct ttcttgagct      480
ttgagagctc aggtgcccgg tatcccaatg ctccagctgt agctatcacg ttggaattag      540
```

cagcagttga catcaaccga gaaagaccaa aatctgcaat tttagcattt gtattctcat 600
 caagcaacac attgctggat gtgaggttcc catgtatgat gttctcctgg gaatgaaggc 660
 agaacaagcc acggggccaag tcttgggcta ttttcatcct tgggtgggcca atcaan 716

<210> 82
 <211> 713
 <212> DNA
 <213> soybean

<220>
 <221> misc_feature
 <223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 82
 ttctaangc ctacgactcc tatagggcga attggggccg acgtcgcatg ctcccggccg 60
 ccatggccgc gggattatac gactcactat agggctcgag cggccactat gaggacagaa 120
 aaaggagtcc ctccagttgc tgggtggtgat gttgaagcag gtggggaggc tggagggaaa 180
 ctagtccatt ttgatggacc aatggctttt acagctgatg atctcttggt tgcaacagct 240
 gagatcatgg gaaagagcac ctatggaact gtttataagg ctattttgga ggatggaagt 300
 caagttgcag taaagagatt gagggaaaag atcactaaag gtcatagaga atttgaatca 360
 gaagtcagtg ttctaggaaa aattagacac cccaatgttt tggctctgag ggctattac 420
 ttgggaccca aaggggaaaa gcttctgggt tttgattaca tgtctaaagg aagtcttgct 480
 tctttcctac atggtaagtt tcgtgtgctg ttctttcatt aagtgttggt tgtgctgttc 540
 ttttaattata atttggagtt ttaccttagt aatctgtata attctaactg gagaacagta 600
 caaacaaaaa cacctaagga acaacacctt anctttaata taccatatca ataagtgaat 660
 tattttctta ttcatcttga tgcaggtggt ggaactgaaa catttatttg atn 713

<210> 83
 <211> 712
 <212> DNA
 <213> soybean

<220>
 <221> misc_feature
 <223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 83
 nnnctaaggc cnttactca ctatngggcg aattggggcc gacgtcgcat gctcccggcc 60

```
gccatggccc gcgggattgg ctttaacttga gtttcaactc cttctctggt cctttaccag 120
ctagcctaac tcactcattt tctctcactt ttctttctct ttaaaataac aatctttctg 180
gctcccttcc taactcttgg ggtgggaatt ccaagaatgg cttctttagg cttcaaaatt 240
tgatcctaga tcataacttt ttcactgggt acgttctctg ttctttgggt agcttaagag 300
agctcaatga gatttccctt agtcataata agtttagtgg agctatacca aatgaaatag 360
gaaccctttc taggcttaag acacttgaca tttctaataa tgccttgaat ggggaacttg 420
ctgctaccct ctctaattta tctcactta cactgctgaa tgcagagAAC aacctccttg 480
acaatcaaat ccctcaaagt ttaggttagat tgcgtaatct ttctgttctg attttgagta 540
gaaaccaatt tagtggacat attccttcaa gcattgcaaa catttctctg cttaggcagc 600
ttgatttgca ctgaataatt tcagtggaga aattccagtc tcctttgcag tcagcgcagt 660
ctaaatctct tcaatggttn ctacaatagn ctctcagggt ctgncccccc tn 712
```

<210> 84

<211> 681

<212> DNA

<213> soybean

<220>

<221> misc_feature

<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 84

```
ggnttcttta gggcttcaaa atttgatcct agatcataac ttttttctact ggtgacgttc 60
ctgcttcttt gggtagctta agagagctca atgagatttc ccttagtcat aataagttta 120
gtggagctat accaaatgaa ataggaaccc tttctaggct taagacactt gacatttcta 180
ataatgcctt gaatgggaac ttgcctgcta ccctctctaa tttatcctca cttacactgc 240
tgaatgcaga gaacaacctc cttgacaatc aaatccctca aagtttaggt agattgcgta 300
atctttctgt tctgattttg agtagaaacc aatttagtgg acatattcct tcaagcattg 360
caaacatttc ctgcttagg cagcttgatt tgcactgaat aatttcagtg gagaaattcc 420
agtctccttt gacagtcaag cgcagctaaa tctcttcaat ggttcctaca atagcctctc 480
agggctctgcc ccctctgct tggcaagaaa tttaactcaa gctcatttgt gggaaatatt 540
caactatgtg gggtagacc ttcaaccca tggctttcca agctncatca caagggggca 600
ttggccccct cctgagnggc aaacatcacc atcataggaa gctaaccca aagacataat 660
tctcatagta nccaggaggt n 681
```

<210> 85
<211> 639
<212> DNA
<213> soybean

<220>
<221> misc_feature
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 85
tcccctttgg gtcccaagta ataggccctc agagccaaaa cattgggggtg tctaattttt 60
cctagaacac tgactttctga ttcaaattct ctatgacctt tagtgatctt ttccctcaat 120
ctctttactg caacttgact tccatcctcc aaaatagcct tataaacagt tccatagggtg 180
ctctttccca tgatctcagc tgttgccacac aagagatcat cagctgtaaa agccattgggt 240
ccatcaaaat ggactagttt ccctccagcc tccccacctg cttcaacatc accaccagca 300
actggaggga ctcccttttc tgtcctcata gtggccgctc taccctcggg ggcttggccg 360
tccccgccct agatgttgat ctctttctga tcaggcagaa aagcaggaca caacaaagta 420
taatcaggac tacgaggaga actcctgcta ctatgagaat tatgtctttg ggcttagctt 480
ctatgatggg gatggtttga cacttcagga ggtggggcaa tgactccttg tgatggagct 540
tgggaaagac atgggggtga agggctggac ccacatagtt gaatatttcc acaaatgagc 600
ttgagttaaa attcttggca agcananggg ggacagaan 639

<210> 86
<211> 661
<212> DNA
<213> soybean

<220>
<221> misc_feature
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 86
gaaggatggg tattttgaag agaaagaaaa gtgagagaaa atgagtgagt taggctagct 60
ggtaaaggac cagagaagga gttgaaactc aagttaagcc aataaagctt agtggaatta 120
gcaagactat aagggattgc tcctgtgagc aagttgttgc tgaggtaag agactgaagc 180
aaagggcaga aacctaaaga aagaggtatg gaacctgtaa gcctattgtt gaataactga 240
acccctctaa gggtgggaag aagtcctaaa gttgaaggga ttgaaccacc aatttgggta 300

tcatgaagac taagcttctg aggccttgaa gttggccaat tttgtcgggtg attcgacccc 360
tcaaaccctt ccaaggaagc tggatcacia taacctgtcc ctgagcacac ttgattccaa 420
cccacctccg gaacaagctc catagccact gtcattccag cttccgcaag aacccttctg 480
gatcagccaa ctcttgcttg aaaagcttat cacatgtacc ttttacagat aggaggntgc 540
ttcttctttt cactggtcta cctcttcgga ataagccaac ctaatgagaa agaaagatct 600
gngatagctn acttacatac tnagnacagag ataattantg naagcnnaag ttaaacntnt 660
t 661

<210> 87
<211> 626
<212> DNA
<213> soybean

<220>
<221> misc_feature
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 87
aattcgtggg ctacaaagga tgaacgtaaa ctatatgcac ctccagctgg ttcaggcttc 60
atatctggct ttactttctat ctcacgcaga tcttctgttg atagtactca aaatctgtct 120
attccttttg gtccaagctc atacctttct gcacaggctc gagtagttga tgagtattct 180
atgtcccaga ttatcttaca aaatgtgctt gatggagggg tcaactgggtat gttaatagtt 240
gtcactgggtg caagccatgt tacatatgga tctagaggaa ctggagtgcc agcaagaatt 300
tcaggaaaaa tacaaaagaa aaaccatgca gttatattac ttgaccctga aagacaattc 360
attcgagag aaggagaagt tcctgttgct gattttttgt ggtattctgc tgcgagaccc 420
tgtagtagaa attgctttga ccgtgctgag attgctcggg ttatgaatgc tgctgggcgg 480
aggcgagatg ccctcccaca ggtaaaccac caattacagt tactaatttg tttgactggt 540
aatcttcttg ccccatagac cctncttcca atttttagcc ctttatgtcc tctcattcct 600
agnnggataa gggtttgggg gnggtg 626

<210> 88
<211> 627
<212> DNA
<213> soybean

<220>
<221> misc_feature
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 88
tgaaaaactg aaggacccaaa tttaatctaa aaaataaata aattaaaaga ctaaaaaata 60
aatctatcca aaattaaaag gtttattctt ggaagtaatg aaatgtattt tgactctttg 120
aagaatgcat tactataatg aaagagtagg tggagagagg ggataataaa atcccactaa 180
ataacatcca tgactatcac tataaaaaaa aatattatta ttaagataag aagaattatc 240
taacttgaat aagagactac taccaaagtg agaaaaaggt cttataacat agagtttttc 300
aagtttacct ataaaacttg taataagatt tgttttccaa ccatctaatt ttttattagt 360
gtggactgca taaaaaaaat atagtaacaa gaaactacta aattagactt tttgaactat 420
tcattgtatg gctgccatga aacctacctg cctggagggg tgggtccac gtaagactgt 480
aagagggagg agggaagcac tagtcacaca ccggcgcacg ttagcgaggc aatgttccta 540
gattgaaacg gagaaggtga ttagaggggc ggaaatctca aagcagacac aggcaactaa 600
tttatcgctt ctttcctcat tcgctta 627

<210> 89
<211> 782
<212> DNA
<213> soybean

<220>
<221> misc_feature
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 89
cacataatta acaataaagt catcttctat tatatatattt ttcttcttaa attacatgat 60
agtatttcat cattatttga caataatgat atttttatct cataaatatt attttgtttt 120
aaaaatattc atagcacaca cgagtttttt atatcaacaa agaggatatca cttcagttgg 180
tcaatttggt ctaactttta gacaatgtcg tatagttgaa ttgaattgga atttggcagt 240
atatatttta ctttttgccc cttattttt aatcaaatta gagtagacgc ctctgattat 300
tggcatacat ggatattgga tcggcacctg tgtttcagac ctgagtcaca tctgactcgg 360
atcgatttta tcttacatga aaattccaaa ataatgaaag atatggtaat tggcaccatg 420
taactctatg gacaccaatg cttcacgtag agctctaaat ttgaggcctt ctatatatag 480
tttgctgac tatgtaaatt atcaatatca tttaattttt ttgcgaccac gaaatatacg 540
aatattattat tgaacacaaa aagtagagtg tatattttta gtctaggatt ttatgagagg 600

caaaaataag aataacctct tgatatatatt tcttggtatc actttcttta ttatatatatt	660
tttaataatg gattataatt tattggaaac aatcaaatta tangggaaaa ttcattggaa	720
taaaagaang aaatttaaaa aaaaatataa tttttaataa atttaagtaa taaaaatcct	780
tt	782

<210> 90
 <211> 160
 <212> DNA
 <213> soybean

<220>
 <221> misc_feature
 <223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 90	
tggttgagat gtgtataaga gacagttgcc ccacctctg aagtgtcaaa acatcaccat	60
cataggaagc taagcaccaa agacataatt ctcatagtag caggagttct cctcgtagtc	120
ctgattatac tttgttgtgt cctgcttttc tgctgatca	160

<210> 91
 <211> 779
 <212> DNA
 <213> soybean

<220>
 <221> misc_feature
 <223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 91	
tgctcccggc gcatggccgn gggattggct taacttgagt ttcaactcct tctctgggtcc	60
tttaccagct agcctaactc actcattttc tctcactttt ctttctcttc aaaataacaa	120
tctttntggc tcccttncta actgtggggg ggggaatanc aagggnggct ttaggctgca	180
aaatttgatc ctagatcata actttttcac tggtgacgtt cctgcttctt tgggtagctt	240
aagagagctc aatgagattt cccttagtca taataagttt agtggagcta taccaaatga	300
aataggaacc ctttctaggc ttaagacact tgacatttct aataatgcct tgaatgggaa	360
cttgctgct accctctcta atttatctc acttacactg ctgaatgcag agaacaacct	420
ccttgacaat caaatccctc aaagtttagg tagattgcgt actctttcct gttccgattt	480
tgagtagaaa ccaatttagt ggacatatc cttcaagcat ngcnnacatt tctcgcctta	540
ggcagcttga ttgtcactga ataatttcag gtggagaaat tncagtcctc tttgacagtc	600

agcgcagtct aaatcttctt caatggttnc tacaataggc ctctcagggc ctggccccc 660
tttgnttggc caaggaaant taacttaagc ttatttgng gggaaanatt caactatggg 720
gggacncggc cctttaaac ccagggnntt tcccaggttc cttccaagg ngcanttgt 779

<210> 92
<211> 743
<212> DNA
<213> soybean

<220>
<221> misc_feature
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 92
ttggcttaac ttgagtttca actccttctc tggtccttta ccagctagcc taactcactc 60
atcttctctc acttttcttt ctcttcaaaa taacaatctt tctggctccc ttcctaactc 120
ttgggggtggg aattccaaga atggcttctt taggcttcaa aatttgatcc tagatcataa 180
ctttttcact ggtgacgttc ctgcttcttt gggtagctta agagagctca atgagatttc 240
ccttagtcat aataagttta gtggagctat accaaatgaa ataggaacc tttctaggct 300
taagacactt gacatttcta ataatgcctt gaatgggaac ttgcctgcta ccctctctaa 360
tttatcctca cttacactgc tgaatgcaga gaacaacctc cttgacaatc aaatccctca 420
aagtttaggt agattgcgta atctttctgt tctgattttg agtagaaacc aatttagtgg 480
acatattcct tcaagcattg caaacatttc ctgcttagg cagcttgatt tgtcactgaa 540
taatttcagt ggagaaattc cagtctcctt tgacagtcag cgcagtctaa atctcttcaa 600
tgtttcttac aatagcctct cangttctgn cccccctctg cttgccaaga aattaactca 660
agctcatttg tgggaaatat tcaactatgt gggacaggcc ttcaacccca ngctttacca 720
agcttcatca caaggggcat tgg 743

<210> 93
<211> 742
<212> DNA
<213> soybean

<220>
<221> misc_feature
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 93

tttaacttgag tttcaactcc ttctctgggc ctttaccagc tagcctaact cactcatttt	60
ctctcacttt tctttctctt caaaataaca atctttctgg ctccttcct aactcttggg	120
gtgggaattc caagaatggc ttcttttaggc ttcaaaattt gatcctagat cataactttt	180
tcaactgggtga cgttcctgct tctttgggta gcttaagaga gctcaatgag atttccctta	240
gtcataataa gtttaatgga gctgtaccaa atgaaatagg aaccctttct aggcttaaga	300
cacttgacat ttctaataat gccttgaatg ggaacttgcc tgctaccctc tctaatttat	360
cctcacttac actgctgaat gcagagaaca acctccttga caatcaaatc cctcaaagtt	420
taggtagatt gcgtaatctt tctgttctga ttttgggtag aaaccaattt agtggacata	480
ttccttcaag cattgcaaac atttctctgc ttaggcagct tgatttgcac tgaataattt	540
cagtggagaa attccagctc cctttgacag tcaagcgcaa gtctaaatct cttcaatggt	600
tcctacaata gcctctcang gtctgncccc cctctgcttg ccaagaaatt taactcaagc	660
tcatttgtgg gaaatattca actatgtggg acagnccttc aaccccatgt tttaccaagc	720
ttcatacaag gagcatggcc ct	742

<210> 94

<211> 741

<212> DNA

<213> soybean

<220>

<221> misc_feature

<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 94

cttaacttga gtttcaactc cttctctggg ctttaccag ctagcctaac tcaactcattt	60
tctctcactt ttctttctct tcaaaataac aatctttctg gctcccttcc taactcttgg	120
gggtgggaatt ccaagaatgg cttcttttagg cttcaaaatt tgatcctaga tcataacttt	180
ttcaactgggt acgttctctgc ttctttgggt agcttaagag agctcaatga gatttccctt	240
agtcataata agtttagtgg agctatacca aatgaaatag gaaccctttc taggcttaag	300
acacttgaca tttctaataa tgcttgaat ggggaacttgc ctgctaccct ctctaattta	360
tcctcactta cactgctgaa tgcagagaac aacctccttg acaatcaaatt ccctcaaagt	420
ttaggtagat tgcgtaatct ttctgttctg attttgagta gaaaccaatt tagtggacat	480
attccttcaa gcattgcaaa catttctctg cttaggcagc ttgatttgca ctgaataatt	540
tcagtggaga aattccagtc tcctttgaca gtcaagcgca gtctaaatct cttcaatggt	600

tctacaata gcctctcang ttctgcccc ctctgcttgc caagaaattt aactcaagct 660
catttggtggg aaatattcaa ctatgtggga caggccttca accccatggt tttccaagct 720
ccatcacaag gggcattgcc t 741

<210> 95
<211> 743
<212> DNA
<213> soybean

<220>
<221> misc_feature
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 95
cttaacttga gtttcaactc cttctctggt cctttaccag ctagcctaac tcaactcattt 60
tctctcactt ttctttctct tcaaaataac aatctttctg gctcccttcc taactcttgg 120
gggtgggaatt ccaagaatgg cttcttttagg cttcaaaatt tgatcctaga tcataacttt 180
ttcactgggtg acgttctctgc ttctttgggt agcttaagag agtcaatga gatttccctt 240
agtcataata agtttagtgg agctatacca aatgaaatag gaaccctttc taggcttaag 300
acacttgaca tttctaataa tgccttgaat gggaacttgc ctgctaccct ctctaattta 360
tcctcactta cactgctgaa tgcagagAAC aacctccttg acaatcaaatt ccctcaaagt 420
ttaggtagat tgcgtaatct ttctgttctg attttgagta gaaaccaatt tagtggacat 480
attccttcaa gcattgcaaa catttctctg cttaggcagc ttgatttgca ctgaataatt 540
tcaaggggag aaattncagt ctcttttgac agtcaagcgc aagtctaaat ctcttcaatg 600
gttctacaa taagcctctc anggtctgnc cccctctgct ttgncaagaa aattaactca 660
agtcatttg ggggaaatat tcaactatgn gggacagncc ttcaacccat gttttccaag 720
ctccatacan gagcatggcc cnt 743

<210> 96
<211> 742
<212> DNA
<213> soybean

<220>
<221> misc_feature
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 96

cttaacttga gtttcaactc cttctctggt cctttaccag ctagcctaac tcaactcattt	60
tctctcactt ttctttctct tcaaaataac aatctttctg gctcccttcc taactcttgg	120
ggtgggaatt ccaagaatgg cttcttttagg cttcaaaatt tgatcctaga tcataacttt	180
ttcactgggtg acgttcctgc ttctttgggt agcttaagag agctcaatga gatttcctt	240
agtcataata agtttagtgg agctatacca aatgaaatag gaaccctttc taggcttaag	300
acacttgaca tttctaataa tgccttgaat ggggaacttgc ctgctaccct ctctaattta	360
tcctcactta cactgctgaa tgcagagAAC aacctccttg acaatcaaAT ccctcaaagt	420
ttaggtagat tgcgtaatct ttctgttctg attttgagta gaaaccaatt tagtggacat	480
attccttcaa gcattgcaaa catttcctcg cttaggcagc ttgatttgtc actgaataat	540
ttcaggggga gaaattccag tctcctttga cagtcagcgc aagtctaaat ctcttcaatg	600
gttctacaa tagcctctca nggtctgncc cccctctgct tgncaagaaa ttaactcaag	660
ctcatttgtg ggaaatatcc aactatgnng gacaggcctt caacccatgt tttccaagc	720
ttcatacaag gagtaatggc ct	742

<210> 97
 <211> 716
 <212> DNA
 <213> soybean

<220>
 <221> misc_feature
 <223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 97	
ggacagaaaa aggagtcctt ccagttgctg gtggtgatgt tgaagcaggt ggggaggctg	60
gagggaaact agtccatttt gatggaccaa tggcttttac agctgatgat ctcttgtgtg	120
caacagctga gatcatggga aagagcacct atggaactgt ttataaggct attttggagg	180
atggaagtca agttgcagta aagagattga gggaaaagat cactaaaggT catagagaat	240
ttgaatcaga agtcagtgtt ctaggaaaaa ttagacaccc caatgttttg gctctgaggg	300
cctattactt gggacccaaa ggggaaaagc ttctggtttt tgattacatg tctaaaggaa	360
gtcttgcttc tttctacat ggtaagtttc gtgtgctgnt ctttcattaa agtgntgggn	420
gggctgggtct ttaattataa tttggagttt taccttanta atctgtataa ttctaactgg	480
agacaagtca aacaaaaacc ctaaggaaca acnccttanc tttaatatnc catatcaata	540
angngaatta tttnttgggt tcatttgatg cnngggggng gnacntnaaa cnttnatttg	600

ntgggccacn anggnnnnaa aanncacaa ananttggnc cngnggnttn gnnntgcctt 660
tantnccang anaaacatna tacanggnan ctnnctcnn naangtnntn gttngn 716

<210> 98
<211> 616
<212> DNA
<213> soybean

<220>
<221> misc_feature
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 98
ggacagaaaa aggagtcctt ccagttgctg gtggtgatgt tgaagcaggt ggggaggctg 60
gagggaact agtccatttt gatggaccaa tggcttttac agctgatgat ctcttgctg 120
caacagctga gatcatggga aagagcacct atggaactgt ttataaggct attttgagg 180
atggaagtca agttgcagta aagagattga gggaaaagat cactaaagggt catagagaat 240
ttgaatcaga agtcagtgtt ctaggaaaaa ttagacaccc caatgttttg gctctgagg 300
cctattactt gggacccaaa ggggaaaagc ttctggtttt tgattacatg tctaaaggaa 360
gtcttgcttc tttctacat ggtaagtttc gtgtgctgtt ctttcattaa gtgttgctg 420
tgctgttctt taattataat ttggagnttt acctagtaa tctgtataat tctaactgga 480
gaacagtcaa acaaaacacc taaggaacaa caccttagct ttaatatcca tatcaataag 540
tgaatatttt ctgggtcatc ttgatgcagg ngngngaact tgaacaatca ttgattggnc 600
caccanggat gaaaat 616

<210> 99
<211> 532
<212> DNA
<213> soybean

<220>
<221> misc_feature
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 99
actggctgtg actgatctct ctggtctaata ctcttcagc tgctggagaa cttgatgaac 60
ttctggctgt gctgatggag aaggatcaac acagtgcaaa gcgagcttca acgtgtttag 120
caactcgtcg ccaactgtgg atgcatctct catcaagtct gcatcaaaaa ctcatttgt 180

ccactcctct ttgacaactg aggcaaccca ctgaggcaaa tctagtcctat tcatagacac 240
cccaggtgat ttctctgtta ggagttctaa caagataaca ccaagactgt agatatcagt 300
tttagtggtt gctttcttga gctttgagag ctcaggtgcc cggtatccca atgctccagc 360
tgtagctatc acgttggaat tagcagcagt tgacatcaac cgagaaagac caaaatctgc 420
aattttagca ttgtattct catcaagcaa cacattgctg gatgtgaggt tcccatgtat 480
gatgttctcc tgggaatgaa ggcggaacaa gccacgggcc aagtcttggt ct 532

<210> 100
<211> 568
<212> DNA
<213> soybean

<220>
<221> misc_feature
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 100
tatgaggaca gaaanttnag tccctccagt tgctggtggt gatgttgaag caggtgggga 60
ggctggaggg aaactagtcc attttgatgg accaatggct ttacagctg atgatctctt 120
gtgtgcaaca gctgagatca tgggaaagag cacctatgga actgtttata aggctatattt 180
ggaggatgga agtcaagttg cagtaaagag attgagggaa aagatcacta aaggatcatag 240
agaatttgaa tcagaagtca gtgttctagg aaaaattaga caccccaatg ttttggtctt 300
gagggcctat tacttgggac ccaaagggga aaagcttctg gtttttgatt acatgtctaa 360
aggaagtctt gcttctttcc tacatggtaa gtttcgtgtg ctgttctttc attaagtgtt 420
gtgtgtgctg ttctttaatt ataatttgga gttttacctt agtaatctgt ataattctaa 480
tcggagaaca gtcaaacaaa aaccctaagg aacacacctt actttaatat accatatcaa 540
taagngaata atttcttggt catcttga 568

<210> 101
<211> 678
<212> DNA
<213> soybean

<220>
<221> misc_feature
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 101
ggtgggactg gctgtgactg atctctctgg tctaactctt tccagctgct ggagaacttg 60

```

atgaacttct ggtcgtgctg atggagaagg atcaacacag tgcaaagcga gcttcaacgt    120
gttttagcaac tcgtcgccaa ctgtggatgc atctctcatc aagtctgcat caaaaacctc    180
at ttgtccac tcctctttga caactgaggc aaccactga ggcaaatacta gtccattcat    240
agacacccca ggtgatttcc tcgttaggag ttctaacaag ataacaccaa gactgtagat    300
atcagtttta gtgtttgctt tcttgagctt tgagagctca ggtgcccggg atcccaatgc    360
tccagctgta gctatcacgt tggaattagc agcagttgac atcaaccgag aaagacaaaa    420
atctgcaatt ttagcatttg tattctcatc aagcaacaca ttgctggatg tgagggtccc    480
atgtatgatg ttctcctggg aatgaaggca gaacaagcca cgggccaagt cttngctat    540
tttcatcctt ggtggccaat caatgaatgg ttcagtttnc ccacctgcat caagatgaac    600
aagaaaataa ttacttatt gatatgggat attaaaagct aaggggtggg ccctaggggg    660
tttggttgga cgggncnn                                                    678

```

<210> 102

<211> 673

<212> DNA

<213> soybean

<220>

<221> misc_feature

<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 102

```

ggtgggactg gctgtgactg atctctcttg tctaatactt tccagctgct ggagaacttg    60
atgaacttct ggtcgtgctg atggagaagg atcaacacag tgcaaagcga gcttcaacgt    120
gttttagcaac tcgtcgccaa ctgtggatgc atctctcatc aagtctgcat caaaaacctc    180
at ttgtccac tcctctttga caactgaggc aaccactga ggcaaatacta gtccattcat    240
agacacccca ggtgatttcc tcgttaggag ttctaacaag ataacaccaa gactgtagat    300
atcagtttta gtgtttgctt tcttgagctt tgagagctca ggtgcccggg atcccaatgc    360
tccagctgta gctatcacgt tggaattagc agcagttgac atcaaccgag aaagacaaaa    420
atctgcaatt ttagcatttg tattctcatc aagcaacaca ttgctggatg tgagggtccc    480
atgtatgatg ttctcctggg aatgaaggca gaacaagcca cggccaagtc ttngctatt    540
ttcatccttg ttggccaatc aatgaatggg tcaagttccc cacctgcatc aagatgaaca    600
agaaaataat tcacttaatg gatatgggat attaaaagcta aggggtgggc cntaggggtt    660

```

ttggggttgnc cng 673

<210> 103
<211> 665
<212> DNA
<213> soybean

<220>
<221> misc_feature
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 103
gggaggactg gctgtgactg atctctctgg tctaattctt tccagctgct ggagaacttg 60
atgaacttct ggtcgtgctg atggagaagg atcaacacag tgcaaagcga gcttcaacgt 120
gttttagcaac tcgtcgccaa ctgtggatgc atctctcatc aagtctgcat caaaaacctc 180
atgtgtccac tcctctttga caactgaggc aaccactga ggcaaatacta gtccattcat 240
agacacccca ggtgatttcc tcgttaggag ttctaacaag ataacaccaa gactgtagat 300
atcagtttta gtgtttgctt tcttgagctt tgagagctca ggtgcccggt atcccaatgc 360
tccagctgta gctatcacgt tggaattagc agcagttgac atcaaccgag aaagacaaaa 420
atctgcaatt ttagcatttg tattctcatc aagcaacaca ttgctggatg tgagggtccc 480
atgtatgatg tctnctggga atgaaggcan aacaagccac ggccaagtct tgggctattt 540
tcaccttgtt ggncaatcaa tgaatggta anttcccccc ctgcttcaag atgaacaaga 600
aaataattca cttattggtt gggntatnaa actaaggggn gncctaggg gnttngntgn 660
ccnct 665

<210> 104
<211> 671
<212> DNA
<213> soybean

<220>
<221> misc_feature
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 104
gggaggactg gctgtgactg atctctctgg tctaattctt tccagctgct ggagaacttg 60
atgaacttct ggtcgtgctg atggagaagg atcaacacag tgcaaagcga gcttcaacgt 120
gttttagcaac tcgtcgccaa ctgtggatgc atctctcatc aagtctgcat caaaaacctc 180
atgtgtccac tcctctttga caactgaggc aaccactga ggcaaatacta gtccattcat 240

```

agacacccca ggtgatttcc tcgttaggag ttctaacaag ataacaccaa gactgtagat 300
atcagtttta gtgtttgctt tcttgagctt tgagagctca ggtgcccggg atcccaatgc 360
tccagctgta gctatcacgt tggaattagc agcagttgac atcaaccgag aaagaccaaa 420
atctgcaatt ttagcatttg tattctcatc aagcaacaca ttgctggatg tgagggtccc 480
atgtatgatg ttctcctggg aatgaaggca gaacaagcca cggccaagtc ttgngctatt 540
ttcatccttg gtggccaatc aatgaatgtt tcagttccac cacctgcac aagatgaaca 600
agaaaataat tcacttattg atatggnata ttaaagctaa ggggtgggtcc ntaggggggtt 660
tngntggncc c 671

```

```

<210> 105
<211> 670
<212> DNA
<213> soybean

```

```

<220>
<221> misc_feature
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

```

```

<400> 105
ggtgggactg gctgtgactg atctctctgg tctaattctt tccagctgct ggagaacttg 60
atgaacttct ggtcgtgctg atggagaagg atcaacacag tgcaaagcga gcttcaacgt 120
gttttagcaac tcgtcgccaa ctgtggatgc atctctcatc aagtctgcat caaaaacctc 180
at ttgtccac tcctctttga caactgaggc aaccactga ggcaaattcta gtccattcat 240
agacacccca ggtgatttcc tcgttaggag ttctaacaag ataacaccaa gactgtagat 300
atcagtttta gtgtttgctt tcttgagctt tgagagctca ggtgcccggg atcccaatgc 360
tccagctgta gctatcacgt tggaattagc agcagttgac atcaaccgag aaagaccaaa 420
atctgcaatt ttagcatttg tantctcatc aagcaacaca ttgctggatg tgagggtccc 480
atgtatgatg tcctcctggg aatgaaggca gaacaagcca cgggccaagt cttgggctat 540
tttcatcctt ggtgggccaa tcaatgaatg gttcaanttc ancacctgcn tcaagangaa 600
caagaaaata attncntatg gnnnggatat naaactaagg gngngnccta ggggtntngn 660
nngnccggcn 670

```

```

<210> 106
<211> 662
<212> DNA

```


<213> soybean

<220>

<221> misc_feature

<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 106

```
ggtagggactg gctgtgactg atctctctgg tctaattctt tccagctgct ggagaacttg      60
atgaactttct ggtcgtgctg atggagaagg atcaacacag tgcaaagcga gcttcaacgt      120
gttttagcaac tcgtcgccaa ctgtggatgc atctctcatc aagtctgcat caaaaacctc      180
at ttgtccac tcctctttga caactgaggc aaccactga ggcaaatacta gtccattcat      240
agacacccca ggtgatttcc tcgttaggag ttctaacaag ataacaccaa gactgtagat      300
atcagtttta gtgtttgctt tcttgagctt tgagagctca ggtgcccggg atcccaatgc      360
tccagctgta gctatcacgt tggaattagc agcagttgac atcaaccgag aaagacacaaa      420
atctgcaatt ttagcatttg tattctcatc aagcaacaca ttgctggatg tgaggttcca      480
tgtatgatgt tctnctggga atgaaggcag aacaagccac gggccaagtc ttgngctatt      540
tcatecttgt gggcaatcaa tgaatgttta anttcncac ctgcttnaga ggaccaagaa      600
aanattactt attggntggg tattaaagct aagggggggn cctaaggggn tttggnnggc      660
cc                                                                                   662
```

<210> 107

<211> 792

<212> DNA

<213> soybean

<220>

<221> misc_feature

<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 107

```
tattttacaac tagtgttatc ggagaatgaa aaattgaaga ataataagtt cagctataat      60
aaactcgagg gaggaaaaac aaagaaattc atgataaata gatataactt attaaattta      120
aggggtgtat ttgcacaccc tgaattatag agattcttat atctttgaga aaataattaa      180
attgggaaaa aagagataat gactgattga gatttgcttc agaattgttc gttttaatat      240
tggtacgaat ctaatggntt tatectgaaa gatgctcaca agtattgagg gactaataaa      300
ttgnattataa actactacta aatgagatga gactttaagg ngactgaag caatatcatt      360
taaaaaatga ctactcgcat ttgngttgag aaaatttatt ttcattgaaag naaattttnt      420
```

ccnttttang ataaagccat ttnncttaac cnnangggga nataaaatgg cccccnttca	480
taaaaaacct accanctata taaatggatn tataccaacc ttcctangca ccatgccatt	540
gggatnggng gaattaaatt naaaangntt gcnttggaat gggtaaaaaa ttccaaaact	600
tnaaccccn ccacaatttt agtggccacn gnaatattnn ttanccgntg gncttttttc	660
caggaaaacg acccgtaacc aaangggggn aaaagggaaa gggagatgga ttgcntgnng	720
gtntgaggct catcccnatt cccaaacatg ttngggnccc aaaaccgaag tnccctgga	780
ccatggatgn cn	792

<210> 108
 <211> 573
 <212> DNA
 <213> soybean

<220>
 <221> misc_feature
 <223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 108	
gggactggct gtgactgac tctctggtct aatctcttcc agctgctgga gaacttgatg	60
aacttctggt cgtgctgatg gagaaggatc aacacagtgc aaagcgagct tcaacgtggt	120
tagcaactcg tcgccaaactg tggatgcac tctcatcaag tctgcatcaa aaacctcatt	180
tgtccactcc tctttgacaa ctgaggcaac ccaactgaggc aaatctagtc cattcataga	240
caccccaggt gatttctctg ttaggagttc taacaagata acaccaagac tgtagatata	300
agtttttagtg tttgctttct tgagctttga gagctcaggt gcccggtatc caatgctcca	360
gctgtagcta tcacgttgga attagcagca gttgacatca acccgagaaa gaccaaatt	420
gcaatttagc anttgnattc ttatnaacaa cacaatgggt ggatgngang gtnccaagga	480
ttgangtttt ctgggaatga aaggganaaa caagccccgg gccaaagntt ggggttattt	540
tnaancctgg ngggncaaan aaangaaagg ttn	573

<210> 109
 <211> 673
 <212> DNA
 <213> soybean

<220>
 <221> misc_feature
 <223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 109
 gggactggct gtgactgatc tctctgggtct aatctcttcc agctgctgga gaacttgatg 60
 aacttctgggt cgtgctgatg gagaaggatc aacacagtgc aaagcgagct tcaacgtggt 120
 tagcaactcg tcgccaactg tggatgcac tctcatcaag tctgcatcaa aaacctcatt 180
 tgtccactcc tctttgacaa ctgaggcaac ccactgaggc aaatctagtc cattcataga 240
 caccacaggt gatttcctcg ttaggagttc taacaagata acaccaagac tgtagatata 300
 agtttttagtg tttgctttct tgagcttttg agaagctcag gtgcccggta tcccaaagtc 360
 ttccagctgt agcttatcac cgttggaat taagcagcaa gttggacatt caaccggag 420
 naaaagaccc aaaaattttg caaattttta agcaatttng gnanttcttn aatcaaggcc 480
 aaccaccaat tggnttggga atggtggaag ggtttcccca atggttaattg gaagggtttc 540
 ttccctnngg gaaaatggaa aggggcaana aaacaaaggc ccaacngggg ccccaaaggt 600
 nttttggggg ccttattttt tncnaatncc ctttggnngg ggncccaaata tcnaaantgg 660
 aaattggntt tnn 673

<210> 110
 <211> 564
 <212> DNA
 <213> soybean

<220>
 <221> misc_feature
 <223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 110
 actggctgtg actgatctct ctggtctaata ctcttccagc tgctggagaa cttgatgaac 60
 ttctggctcg gctgatggag aaggatcaac acagtgcaaa gcgagcttca acgtgttttag 120
 caactcgtcg ccaactgtgg atgcatctct catcaagtct gcatcaaaaa cctcatttgt 180
 ccactcctct ttgacaactg aggcaacca ctgaggcaaa tctagtccat tcatagacac 240
 cccaggtgat ttctcgtta ggagttctaa caagataaca ccaagactgt agatatcagt 300
 tttagtgttt gctttcttga gctttgagag ctgaggtgcc cggatatcca atgctccagc 360
 tgtagctatc acgttggaa tagcagcagt tgacatcaac ccgagaaaga ccaaaatctg 420
 caatttttagc atttgtattc tcatcaagca acacattgct ggatgtgagg ttcccatgta 480
 tgatgttctc ctgggaatga aggcagaaca agccacggcc aagcttggct atttcatcct 540
 tgtggccaat caatgaatgg tcat 564

<210> 111
<211> 456
<212> DNA
<213> soybean

<220>
<221> misc_feature
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 111
actatgagga cagaaaaagg agtcctcca gttgctggtg gtgatgttga agcgggtggg 60
gaggctggag ggaaactagt ccattttgat ggaccaatgg cttttacagc tgatgatctc 120
ttgtgtgcaa cagctgagat catgggaaag agcacctatg gaactgttta taaggctatt 180
ttggaggatg gaagtcaagt tgcagtaaag agattgaggg aaaagatcac taaaggctcat 240
agagaatttg aatcanaagt cagtgttcta ggaaaaatta nacaccccaa tgttttgggt 300
ntgaggccta ttacttggga cccaaagggg aaaagcttnt ggtttttgat tcatgtntaa 360
aggaagtctt gcttntttcc tacatggnaa gtttcggggc tgtctttnat taanggtngg 420
gngngctggn tttaattata attngnggtt tacctt 456

<210> 112
<211> 592
<212> DNA
<213> soybean

<220>
<221> misc_feature
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 112
actatgagga cagaaaaagg agtcctcca gttgctggtg gtgatgttga agcaggtggg 60
gaggctggag ggaaactagt ccattttgat ggaccaatgg cttttacagc tgatgatctc 120
ttgtgtgcaa cagctgagat catgggaaag agcacctatg gaactgttta taaggctatt 180
ttggaggatg gaagtcaagt tgcagtaaag agattgaggg aaaagatcac taaaggctcat 240
agagaatttg aatcagaagt cagtgttcta ggaaaaatta gacaccccaa tgttttggct 300
ctgagggcct attacttggg acccaaaggg gaaaagcttc tggtttttga ttacatgtct 360
aaaggaagtc ttgcttcttt cctacatggg aagtttcgtg tgctgttctt tcattaagtg 420
ttgggtgtgc tgggtctttaa ttataatttg gagtttacct tannaatctg gataattcta 480

atcggagaac agncaaacaa aanccctaag gaacaaccct tancctttaat atccatatca 540
ataagngaam tattttcttgg tcatcttgat gcaggggggg gnactgaaca tt 592

<210> 113
<211> 460
<212> DNA
<213> soybean

<220>
<221> misc_feature
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 113
gggactggct gtgactgac tctctggtct aatctcttcc agctgctgga gaacttgatg 60
aacttctggt cgtgctgatg gagaaggatc aacacagtgc aaagcgagct tcaacgtggt 120
tagcaactcg tcgccaactg tggatgcac tctcatcaag tctgcatcaa aaacctcatt 180
tgtccactcc tctttgacaa ctgaggcaac cactgagggc aaatctagtc cattcataga 240
caccacaggt gatttctctg ttaggagttc taacaagata acaccaagac tgtagatata 300
agtttttagtg tttgctttct tgagctttga gagctcaggt gcccggtatc ccaatgcttc 360
agctgtagct atcacgttgg aattagcagc agttgacatc aaccgagaaa gaccaaatac 420
tgcaatttta gcatttgnat tctcattaaa caacacaatg 460

<210> 114
<211> 566
<212> DNA
<213> soybean

<220>
<221> misc_feature
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 114
gggactggct gtgactgac tctctggtct aatctcttcc agctgctgga gaacttgatg 60
aacttctggt cgtgctgatg gagaaggatc aacacagtgc aaagcgagct tcaacgtggt 120
tagcaactcg tcgccaactg tggatgcac tctcatcaag tctgcatcaa aaacctcatt 180
tgtccactcc tctttgacaa ctgaggcaac cactgagggc aaatctagtc cattcataga 240
cncaccaggt gatttctctg ttaggagttc taacaagata acaccaagac tgtagatata 300
agtttttagtg tttgctttct tgagctttga gagttaaggg ncccggantc ccannntcn 360
agttgnagtt atancgttgg aattagcagn agttgcntca accgaaaaag accaaaatct 420

gaatttttagc atttgttttt catcaagcaa cacattgntg gatgngagggt cccatgtatg 480
atgttctcct gggaatgaag gcaaacaagc ccggggccaag gcttgggcta ttttaatcct 540
tggtggccaa acaatgaaag gttnat 566

<210> 115
<211> 16
<212> DNA
<213> soybean

<400> 115
gactgcgtac caattc 16

<210> 116
<211> 16
<212> DNA
<213> soybean

<400> 116
gatgagtcct gagtaa 16

<210> 117
<211> 22
<212> DNA
<213> soybean

<400> 117
gggtttcaga taaccgtggg cg 22

<210> 118
<211> 25
<212> DNA
<213> soybean

<400> 118
ttgcagatat tttagttgat tggcc 25

<210> 119
<211> 24
<212> DNA
<213> soybean

<400> 119
agttgattgg ctcaaaccat ggcc 24

<210> 120
<211> 20
<212> DNA
<213> soybean

<400> 120
ttgcgtgtga tcggtattac 20

<210> 121
<211> 20
<212> DNA
<213> soybean

<400> 121
tacctgagtt ctctcaagtc 20

<210> 122
<211> 252
<212> DNA
<213> soybean

<220>
<221> misc_feature
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 122
gatttagact gcgctgactn tcaaaggaga ctggaatttc tccactgaaa ttattcagtg 60
acaaatcaag ctgcctaagc gaggaaatgt ttgcaatgct tgaaggaata tgtccactaa 120
attggtttct actcaaaatc agaacagaaa gattacgcaa tctacctaaa ctttgagggga 180
tttgattgtc aaggagggttg ttctctgcat tcagcagtggt aagtgaggat aaattagaga 240
gggtagcagg ca 252